



Recommendation ITU-R M.1457-9
(05/2010)

**Detailed specifications of the terrestrial
radio interfaces of International
Mobile Telecommunications-2000
(IMT-2000)**

M Series
**Mobile, radiodetermination, amateur
and related satellite services**

Foreword

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SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
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SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
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Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

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RECOMMENDATION ITU-R M.1457-9*

Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-2000 (IMT-2000)**

(2000-2001-2004-2005-2006-2007-2009-2010)

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* The Administration of China did not agree to the approval of the revision of this Recommendation for inclusion of OFDMA TDD WMAN during the Radiocommunication Assembly (Geneva, 2007) (RA-07). The reasons can be found in the summary record of RA-07.

** The recommended detailed specifications of the radio interfaces of IMT-2000 are contained in the core global specifications which form part of this Recommendation by means of references to uniform resource locators (URLs) at the ITU Web site. For those cases where recognized external organizations have converted these core global specifications or parts thereof into their own approved standards, a reference to the corresponding external text is included in this Recommendation by means of URLs at their Web sites. Such references do not give the external texts the status, as stand-alone texts, of ITU Recommendations. Any reference to an external text is accurate at the time of approval of this Recommendation. Since the external text may be revised, users of this Recommendation are advised to contact the source of the external text to determine whether the reference is still current. This Recommendation will be subject to periodic updates that will be coordinated with the appropriate recognized external organizations responsible for the external texts that are referenced.

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1 Introduction¹

IMT-2000, third generation mobile systems started service around the year 2000, and provide access by means of one or more radio links to a wide range of telecommunications services supported by the fixed telecommunication networks (e.g. PSTN/ISDN/Internet protocol (IP)) and to other services specific to mobile users. Since then, IMT-2000 has been continually enhanced.

A range of mobile terminal types is encompassed, linking to terrestrial and/or satellite-based networks, and the terminals may be designed for mobile or fixed use.

Key features of IMT-2000 are:

- high degree of commonality of design worldwide;
- compatibility of services within IMT-2000 and with the fixed networks;
- high quality;
- small terminal for worldwide use;
- worldwide roaming capability;
- capability for multimedia applications, and a wide range of services and terminals.

IMT-2000 systems are defined by a set of interdependent Recommendations of which this is a member.

This Recommendation forms the final part of the process of specifying the radio interfaces of IMT-2000, as defined in Recommendation ITU-R M.1225. It identifies the detailed specifications for the IMT-2000 radio interfaces.

Besides Recommendation ITU-R M.1457, there are a number of other ITU-R Recommendations for IMT (Recommendations ITU-R M.1036, ITU-R M.1580, ITU-R M.1581, ITU-R M.1579, etc.) that provide relevant implementation aspects enabling the most effective and efficient use and deployment of systems – while minimizing the impact on other systems or services in these and in adjacent bands – and facilitating the growth of IMT systems.

This Recommendation has been developed based on consideration of the results of a defined evaluation process employed by the ITU-R on IMT-2000 radio proposals that have been submitted in response to a set of defined requirements. Further consideration was given to consensus building, recognizing the need to minimize the number of different radio interfaces and maximize their commonality keeping in mind the end-user needs, while incorporating the best possible performance capabilities in the various IMT-2000 radio operating environments.

Revisions to this Recommendation have been developed jointly by the ITU and the radio interface technology proponent organizations, global partnership projects and standards development organizations. Updates, enhancements and additions to the radio interfaces incorporated in this Recommendation have undergone a defined process of development and review to ensure consistency with the original goals and objectives established for IMT-2000 while acknowledging the obligation to accommodate the changing requirements of the global marketplace.

By updating the existing technologies, harmonizing existing interfaces, and entertaining new mechanisms, IMT-2000 remains at the forefront of mobile radio technology.

2 Scope

This Recommendation identifies the IMT-2000 terrestrial radio interface specifications, based on the output of activities outside ITU.

These radio interfaces support the features and design parameters of IMT-2000, including the capability to ensure worldwide compatibility, international roaming, and access to high-speed data services.

¹ Abbreviations used in this Recommendation are listed in Annex 1.

This Recommendation is complemented by other ITU-R Recommendations and Reports on IMT-2000 that provide additional details on a number of aspects including frequency arrangements and unwanted emission characteristics.

3 Related Recommendations

The existing IMT-2000 Recommendations that are considered to be of importance in the development of this particular Recommendation are as follows:

Recommendation ITU-R M.687:	International Mobile Telecommunications-2000 (IMT-2000)
Recommendation ITU-R M.816:	Framework for services supported on International Mobile Telecommunications-2000 (IMT-2000)
Recommendation ITU-R M.817:	International Mobile Telecommunications-2000 (IMT-2000) – <i>Network architectures</i>
Recommendation ITU-R M.819:	International Mobile Telecommunications-2000 (IMT-2000) for developing countries
Recommendation ITU-R M.1034:	Requirements for the radio interface(s) for International Mobile Telecommunications-2000 (IMT-2000)
Recommendation ITU-R M.1035:	Framework for the radio interface(s) and radio sub-system functionality for International Mobile Telecommunications-2000 (IMT-2000)
Recommendation ITU-R M.1036:	Spectrum considerations for implementation of International Mobile Telecommunications-2000 (IMT-2000) in the bands 1 885-2 025 MHz and 2 110-2 200 MHz
Recommendation ITU-R M.1224:	Vocabulary of terms for International Mobile Telecommunications-2000 (IMT-2000)
Recommendation ITU-R M.1225:	Guidelines for evaluation of radio transmission technologies for IMT-2000
Recommendation ITU-R M.1308:	Evolution of land mobile systems towards IMT-2000
Recommendation ITU-R M.1311:	Framework for modularity and radio commonality within IMT-2000
Recommendation ITU-R M.1579:	Global circulation of IMT-2000 terminals
Recommendation ITU-R M.1580:	Generic unwanted emission characteristics of base stations using the terrestrial radio interfaces of IMT-2000
Recommendation ITU-R M.1581:	Generic unwanted emission characteristics of mobile stations using the terrestrial radio interfaces of IMT-2000
Recommendation ITU-R M.1850:	Detailed specifications of the radio interfaces for the satellite component of International Mobile Telecommunications-2000 (IMT-2000)
Recommendation ITU-R SM.329:	Spurious emissions
ITU-T Recommendation Q.1701:	Framework of IMT-2000 networks
ITU-T Recommendation Q.1711:	Network functional model for IMT-2000
ITU-T Recommendation Q.1721:	Information flows for IMT-2000 capability set 1
ITU-T Recommendation Q.1731:	Radio-technology independent requirements for IMT-2000 layer 2 radio interface
Handbook on Land Mobile (including Wireless Access), Volume 2: Principles and Approaches on Evolution to IMT-2000/FPLMTS.	

4 Considerations

4.1 Radio interfaces for IMT-2000

IMT-2000 consists of both terrestrial component and satellite component radio interfaces. In particular, the terrestrial radio interfaces are fully defined by information supplied within this Recommendation and by information incorporated by reference to external materials. The satellite radio interfaces are fully defined by information supplied with Recommendation ITU-R M.1850.

The radio interfaces for the terrestrial component are described in detail in § 5.

4.2 Incorporation of externally developed specification material

IMT-2000 is a system with global development activity and the IMT-2000 radio interface specifications identified in this Recommendation have been developed by the ITU in collaboration with the radio interface technology proponent organizations, global partnership projects and standards development organizations (SDOs). The ITU has provided the global and overall framework and requirements, and has developed the core global specifications jointly with these organizations. The detailed standardization has been undertaken within the recognized external organization (see Note 1), which operate in concert with the radio interface technology proponent organizations and global partnership projects. This Recommendation therefore makes extensive use of references to externally developed specifications.

NOTE 1 – A “recognized organization” in this context is defined to be a recognized SDO that has legal capacity, a permanent secretariat, a designated representative, and open, fair, and well-documented working methods.

This approach was considered to be the most appropriate solution to enable completion of this Recommendation within the aggressive schedules set by the ITU and by the needs of administrations, operators and manufacturers.

This Recommendation has therefore been constructed to take full advantage of this method of work and to allow the global standardization time-scales to be maintained. The main body of this Recommendation has been developed by the ITU, with references within each radio interface pointing to the location of the more detailed information. The sub-sections containing this detailed information have been developed by the ITU and the recognized external organizations. Such use of referencing has enabled timely completion of the high-level elements of this Recommendation, with change control procedures, transposition (conversion of the core specifications into SDO deliverables) and public enquiry procedures being undertaken within the recognized external organization.

The structure of the detailed specifications received from the recognized external organization has generally been adopted unchanged, recognizing the need to minimize duplication of work, and the need to facilitate and support an on-going maintenance and update process.

This general agreement, that the detailed specifications of the radio interface should to a large extent be achieved by reference to the work of recognized external organizations, highlights not only the ITU's significant role as a catalyst in stimulating, coordinating and facilitating the development of advanced telecommunications technologies, but also its forward-looking and flexible approach to the development of this and other telecommunications standards for the 21st century.

5 Recommendations

The Radiocommunication Assembly recommends that the radio interfaces given in §§ 5.1 to 5.6 should be those of the terrestrial component of IMT-2000.

The terrestrial radio interface sections are identified as:

- IMT-2000 CDMA Direct Spread
- IMT-2000 CDMA Multi-Carrier
- IMT-2000 CDMA TDD
- IMT-2000 TDMA Single-Carrier

- IMT-2000 FDMA/TDMA
- IMT-2000 OFDMA TDD WMAN.

An overview of each radio interface is provided in §§ 5.1.1, 5.2.1, 5.3.1, 5.4.1, 5.5.1 and 5.6.1.

The detailed information provided and/or referenced in §§ 5.1.2, 5.2.2, 5.3.2, 5.4.2, 5.5.2 and 5.6.2 is recommended as the complete definition of the radio interfaces of the terrestrial component of IMT-2000.

5.1 IMT-2000 CDMA Direct Spread

5.1.1 Overview of the radio interface

5.1.1.1 Introduction

The IMT-2000 radio-interface specifications for CDMA Direct Spread technology are developed by a partnership of SDOs (see Note 1). This radio interface is called Universal Terrestrial Radio Access (UTRA) FDD or Wideband CDMA (WCDMA).

NOTE 1 – Currently, these specifications are developed within the third generation partnership project (3GPP) where the participating SDOs are the Association of Radio Industries and Businesses (ARIB), China Communications Standards Association (CCSA), the European Telecommunications Standards Institute (ETSI), Alliance for Telecommunications Industry Solutions (ATIS Committee T1P1), Telecommunications Technology Association (TTA) and Telecommunication Technology Committee (TTC).

These radio-interface specifications have been developed with the strong objective of harmonization with the TDD component (see § 5.3) to achieve maximum commonality. This was achieved by harmonization of important parameters of the physical layer. Furthermore, a common set of protocols in the higher layers is specified for both FDD and TDD.

In the development of this radio interface the CN specifications are based on an evolved GSM-MAP. However, the specifications include the necessary capabilities for operation with an evolved ANSI-41-based CN.

The radio-access scheme is Direct-Sequence CDMA (DS-SS) with information spread over approximately 5 MHz bandwidth using a chip rate of 3.84 Mchip/s. The radio interface is defined to carry a wide range of services to efficiently support both circuit-switched services (e.g. PSTN- and ISDN-based networks) as well as packet-switched services (e.g. IP-based networks). A flexible radio protocol has been designed where several different services such as speech, data and multimedia can simultaneously be used by a user and multiplexed on a single carrier. The defined radio-bearer services provide support for both real-time and non-real-time services by employing transparent and/or non-transparent data transport. The quality of service (QoS) can be adjusted in terms such as delay, bit error probability, and frame error ratio (FER).

The radio-interface specification includes enhanced features for High-Speed Downlink Packet Access (HSDPA), Multiple Input Multiple Output Antennas (MIMO), higher order modulation (64-QAM) and improved L2 support for high data rates allowing for downlink packet-data transmission with peak data rates approaching 42 Mbit/s and simultaneous high-speed packet data and other services such as speech on the single carrier. In particular, features for enhanced uplink have been introduced, allowing for improved capacity and coverage, higher data rates than the current uplink maximum, and reduced delay and delay variance for the uplink. The addition of higher order modulation (16-QAM) for the enhanced uplink, allows for peak data rates up to 11 Mbit/s. For efficient support of always-on connectivity whilst enabling battery saving in the UE and further increasing the air interface capacity, the specifications also include the Continuous Packet Connectivity feature (CPC). Similar to the downlink, the improved L2 support for uplink is supported to allow efficient support of high data rates and reduced L2 overhead. For fast state transitions between different states, the specifications also include Enhanced CELL_FACH state, supporting both HSDPA and Enhanced Uplink operation. The CS voice services are supported over HSPA. DC-HSDPA provides support for HSDPA operation on two adjacent carriers in combination with 64-QAM, supporting increased average user throughput and capacity as well as peak data rates reaching up to 42 Mbit/s. HSDPA mobility is further improved by the HS-DSCH serving cell change enhancement feature. The UE battery saving is further enhanced by introduction of DRX support to CELL_FACH state.

The radio access network architecture also provides support for multimedia broadcast and multicast services, i.e. allowing for multimedia content distribution to groups of users over a point-to-multipoint bearer. More efficient provision of MBMS is supported by Single Frequency Network (SFN) operation with MBSFN.

CDMA Direct Spread was originally specified for the IMT-2000 bands identified in WARC-92 and using 1 920-1 980 MHz as uplink and 2 110-2 170 MHz as downlink. At WRC-2000 additional spectrum for IMT-2000 was identified and subsequently as a complement to 3GPP Release 99 the relevant specifications have been updated to also include the 2.6 GHz, 1 900 MHz, 1 800 MHz, 1 700 MHz, 1 500 MHz, 900 MHz, 850 MHz, and 800 MHz bands as well as a pairing of parts, or whole, of 1 710-1 770 MHz as uplink with whole, or parts, of 2 110-2 170 MHz as downlink. In addition a more general study has been performed considering the viable deployment of CDMA Direct Spread in additional and diverse spectrum arrangements.

E-UTRAN has been introduced for the evolution of the radio-access technology towards a high-data-rate, low-latency and packet-optimized radio-access technology.

E-UTRAN supports scalable bandwidth operation below 5 MHz bandwidth options up to 20 MHz in both the uplink and downlink. Harmonization of paired and unpaired operation is highly considered to avoid unnecessary fragmentation of technologies.

The estimated peak rates deemed feasible with E-UTRAN are summarized in Tables 13.1 and 13.2 of TR 25.913² for FDD and TDD. For both uplink and downlink, it was found that achieving and even exceeding the peak rate requirements outlined in TR 25.912³ is feasible. This is based on a preliminary layer 1 and layer 2 control overhead as well as realistic assumptions on the highest modulation order which can be used in the most favorable WAN environments. The text in TS 36.306 provides specific parameters and from this the estimated downlink peak rate under the specified conditions in a 20 MHz reference bandwidth is around 300 Mbit/s and the estimated uplink peak rate under the specified conditions in a 20 MHz reference bandwidth is around 75 Mbit/s.

The radio access network architecture of E-UTRAN consists of the evolved UTRAN Node Bs (eNBs). eNBs host the functions for radio resource management, IP header compression and encryption of user data stream, etc. eNBs are interconnected with each other and connected to an Evolved Packet Core (EPC).

5.1.1.2 Radio access network architecture

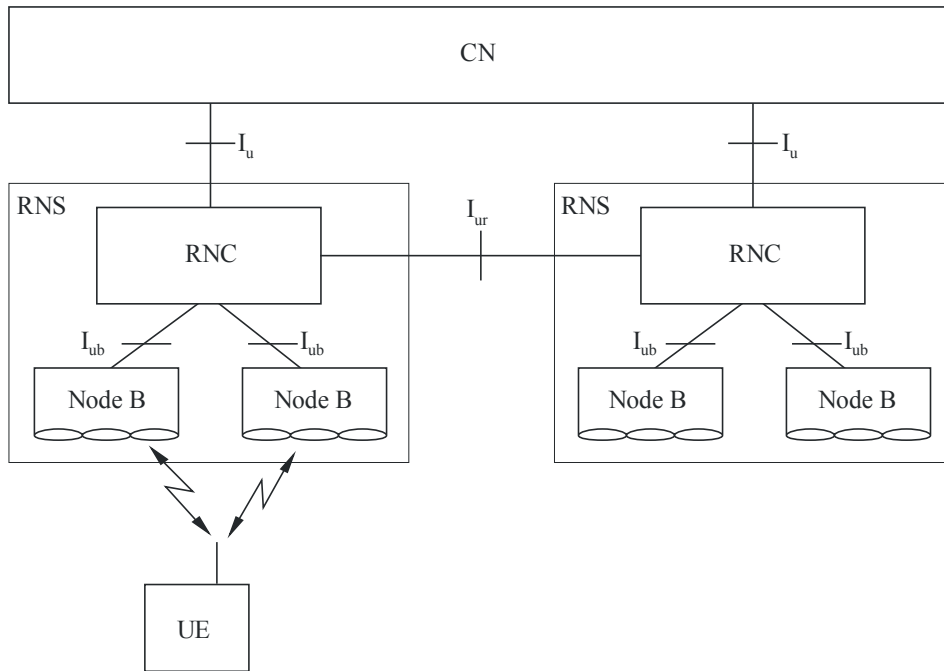
The overall architecture of the radio access network is shown in Fig. 1.

The architecture of this radio interface consists of a set of radio network subsystems (RNS) connected to the CN through the Iu interface. An RNS consists of a radio network controller (RNC) and one or more entities called Node B. Node B is connected to the RNC through the Iub interface. Each Node B can handle one or more cells. The RNC is responsible for the handover decisions that require signalling to the user equipment (UE). In case macro diversity between different Node Bs is to be supported, the RNC comprises a combining/splitting function to support this. Node B can comprise an optional combining/splitting function to support macro diversity within a Node B. The RNCs of the RNS can be interconnected through the Iur interface. Iu and Iur are logical interfaces, i.e. the Iur interface can be conveyed over a direct physical connection between RNCs or via any suitable transport network.

² 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Feasibility study for evolved Universal Terrestrial Radio Access (UTRA) and Universal Terrestrial Radio Access Network (UTRAN) (Release 8).

³ 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Requirements for Evolved UTRA (E-UTRA) and Evolved UTRAN (E-UTRAN) (Release 8).

FIGURE 1
Radio access network architecture
 (Cells are indicated by ellipses)

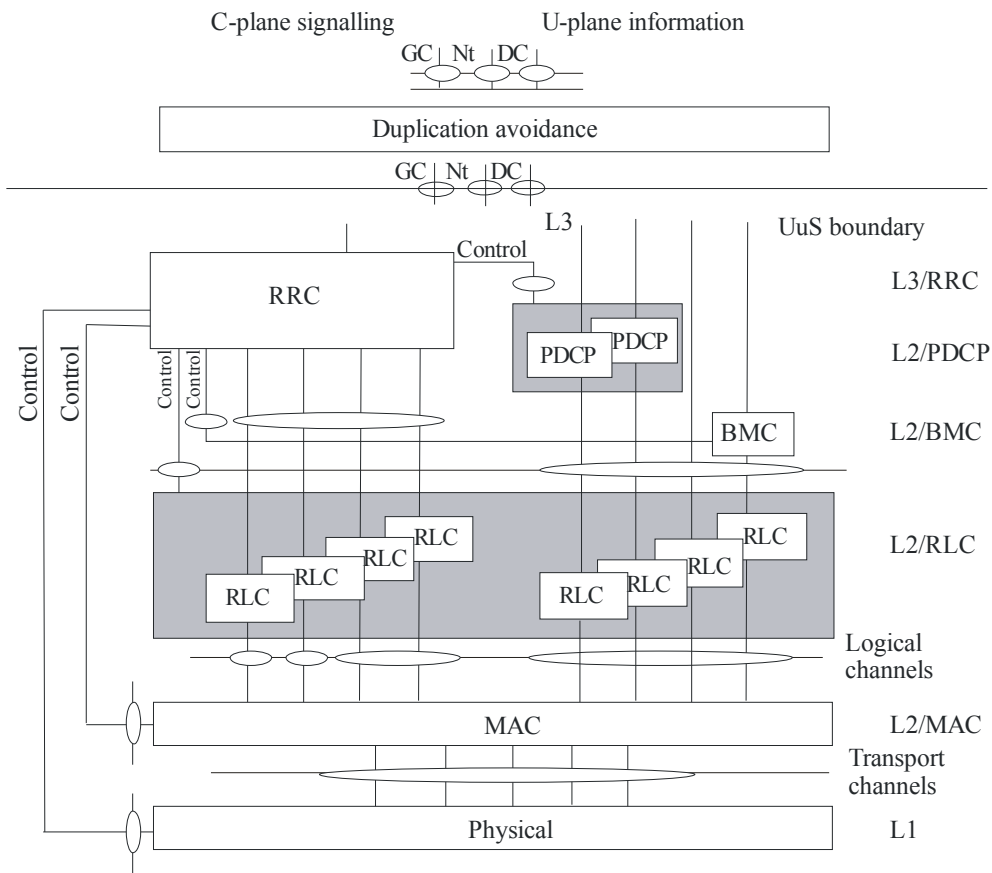


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Figure 2 shows the radio interface protocol architecture for the radio access network. On a general level, the protocol architecture is similar to the current ITU-R protocol architecture as described in Recommendation ITU-R M.1035. Layer 2 (L2) is split into the following sub-layers; radio link control (RLC), medium access control (MAC), Packet Data Convergence Protocol (PDCP) and Broadcast/Multicast Control (BMC). Layer 3 (L3) and RLC are divided into control (C-plane) and user (U-plane) planes. In the C-plane, L3 is partitioned into sub-layers where the lowest sub-layer, denoted as radio resource control (RRC), interfaces with L2. The higher-layer signalling such as mobility management (MM) and call control (CC) are assumed to belong to the CN. There are no L3 elements in this radio interface for the U-plane.

Each block in Fig. 2 represents an instance of the respective protocol. Service access points (SAPs) for peer-to-peer communication are marked with circles at the interface between sub-layers. The SAP between MAC and the physical layer provides the transport channels. A transport channel is characterized by how the information is transferred over the radio interface (see § 5.1.1.3.1 for an overview of the types of transport channels defined). The SAPs between RLC and the MAC sub-layer provide the logical channels. A logical channel is characterized by the type of information that is transferred over the radio interface. The logical channels are divided into control channels and traffic channels. The different types of logical channels are not further described in this overview. In the C-plane, the interface between RRC and higher L3 sub-layers (CC, MM) is defined by the general control (GC), notification (Nt) and dedicated control (DC) SAPs. These SAPs are not further discussed in this overview.

FIGURE 2
Radio interface protocol architecture of the RRC sublayer (L2 and L1)



M.1457-02

Also shown in Fig. 2 are connections between RRC and MAC as well as RRC and L1 providing local inter-layer control services (including measurement results). An equivalent control interface exists between RRC and the RLC sub-layer. These interfaces allow the RRC to control the configuration of the lower layers. For this purpose separate control SAPs are defined between RRC and each lower layer (RLC, MAC, and L1).

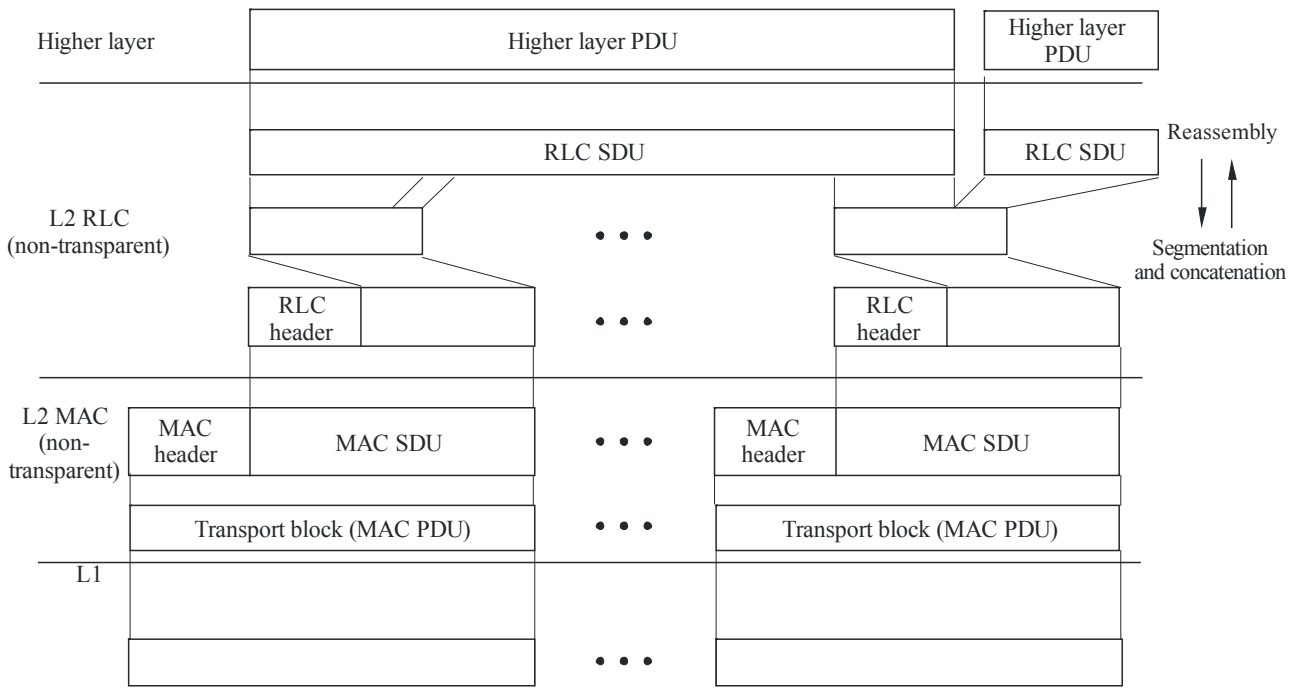
Figure 3 shows the general structure and some additional terminology definitions of the channel formats at the various sub-layer interfaces indicated in Fig. 2. The figure indicates how higher layer service data units (SDUs) and protocol data units (PDUs) are segmented and multiplexed to transport blocks to be further treated by the physical layer (e.g. CRC handling). The transmission chain of the physical layer is exemplified in the next section.

The E-UTRAN radio access network consists of eNBs, providing the user plane (PDCP/RLC/MAC/PHY) and control plane (RRC) protocol terminations towards the UE. The eNBs are interconnected with each other by means of the X2 interface. The eNBs are also connected by means of the S1 interface to the EPC (Evolved Packet Core), and more specifically to the MME (Mobility Management Entity) by means of the S1-MME and to the S-GW (Serving Gateway) by means of the S1-U. The S1 interface supports a many-to-many relation between MMEs/Serving Gateways and eNBs.

The E-UTRAN radio access network architecture is illustrated in Fig. 4.

FIGURE 3

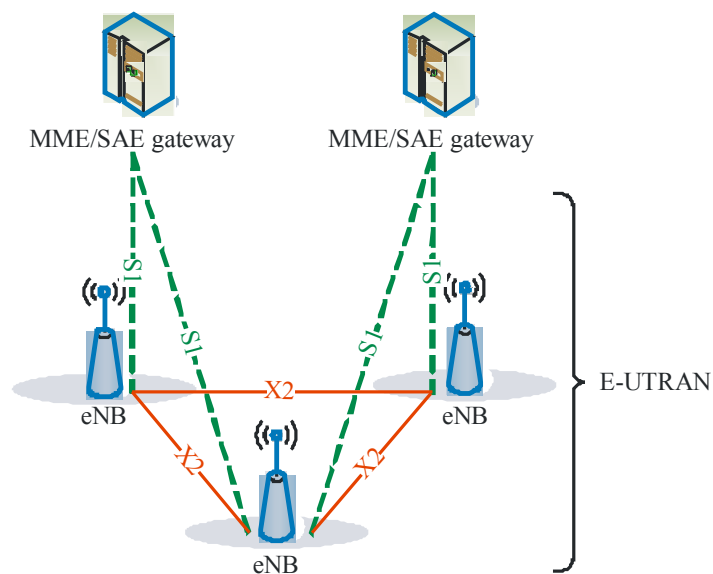
Data flow for a service using a non-transparent RLC and non-transparent MAC
 (see §§ 5.1.1.4.1 and 5.1.1.4.2 for further definitions of the MAC and RLC services and functionality)



M.1457-03

FIGURE 4

Overall architecture



M.1457-04

The eNB hosts the following functions:

- functions for Radio Resource Management: Radio Bearer Control, Radio Admission Control, Connection Mobility Control, Dynamic allocation of resources to UEs in both uplink and downlink (scheduling);
- IP header compression and encryption of user data stream;
- selection of an MME at UE attachment;
- routing of User Plane data towards S-GW;
- scheduling and transmission of paging messages (originated from the MME);
- scheduling and transmission of broadcast information (originated from the MME or O&M);
- measurement and measurement reporting configuration for mobility and scheduling.

The MME hosts the following functions:

- NAS signalling;
- NAS signalling security;
- Inter CN node signalling for mobility between 3GPP access networks;
- Idle mode UE Reachability (including control and execution of paging retransmission);
- Tracking Area list management (for UE in idle and active mode);
- PDN GW and Serving GW selection;
- MME selection for handovers with MME change;
- SGSN selection for handovers to 2G or 3G 3GPP access networks;
- Roaming;
- Authentication;
- Bearer management functions including dedicated bearer establishment.

The S-GW hosts the following functions:

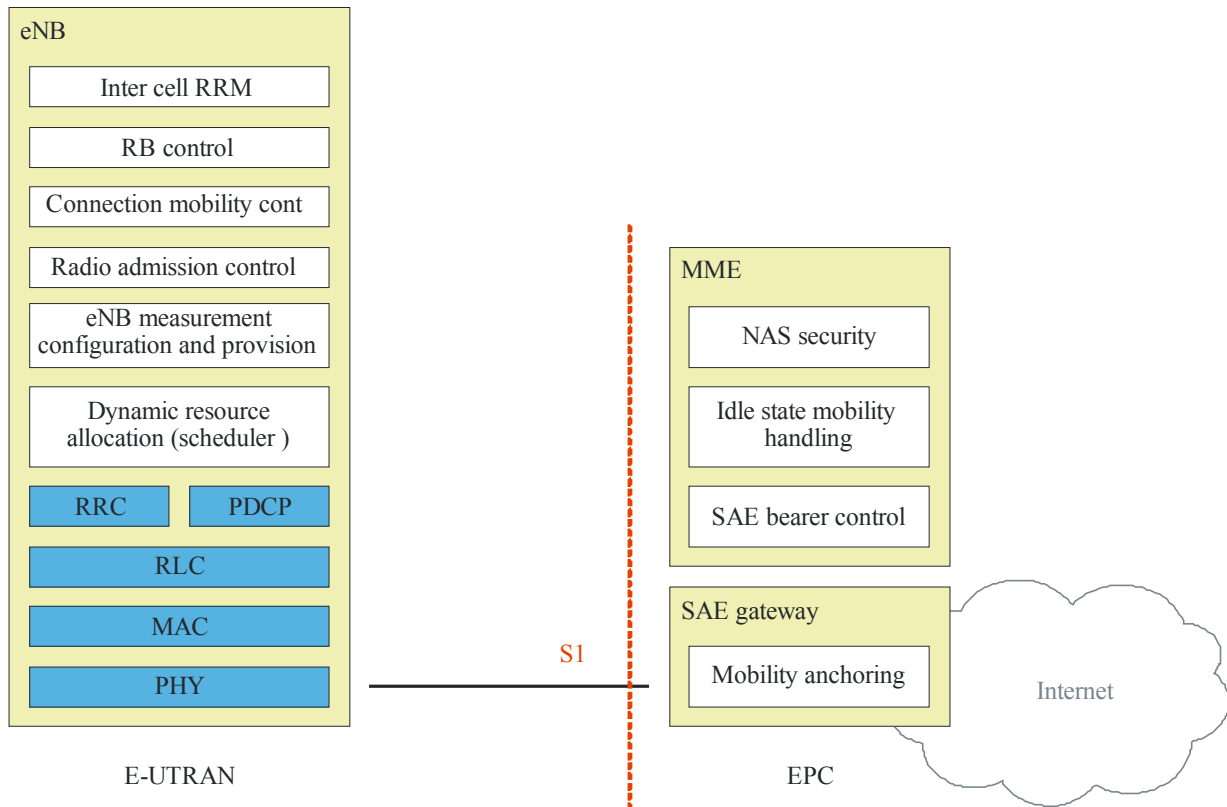
- The local Mobility Anchor point for inter-eNB handover;
- Mobility anchoring for inter-3GPP mobility;
- E-UTRAN idle mode downlink packet buffering and initiation of network triggered service request procedure;
- Lawful Interception;
- Packet routing and forwarding;
- Transport level packet marking in the uplink and the downlink;
- Accounting on user and QCI granularity for inter-operator charging;
- UL and DL charging per UE, PDN, and QCI.

The PDN Gateway (P-GW) hosts the following functions:

- Per-user based packet filtering (by e.g. deep packet inspection);
- Lawful Interception;
- UE IP address allocation;
- Transport level packet marking in the downlink;
- UL and DL service level charging, gating and rate enforcement;
- DL rate enforcement based on AMBR.

This is summarized in the Fig. 5 where yellow boxes depict the logical nodes, white boxes depict the functional entities of the control plane and blue boxes depict the radio protocol layers.

FIGURE 5
Overall architecture of the E-UTRAN radio access network



M.1457-05

5.1.1.3 Physical layer

5.1.1.3.1 Transport Channels

Transport channels are the services offered by the physical layer to MAC and higher layers. The general classification of transport channels is into two groups:

- Common transport channels where there is a need for explicit UE identification when a particular UE is addressed or a particular group of UEs are addressed.
- Dedicated transport channels where a UE is implicitly identified by the physical channel, i.e. code and frequency.

Common transport channel types are:

- **Random Access Channel (RACH)**

A contention based uplink channel used for transmission of relatively small amounts of data, e.g. for initial access or non-real-time dedicated control or traffic data.

- **Common Packet Channel (CPCH)***

A contention based uplink channel used for transmission of bursty data traffic. The common packet channel is shared by the UEs in a cell and therefore, it is a common resource. The CPCH is fast power controlled.

* Available only in 3GPP Rel99 and Rel4 Specifications.

- **Forward Access Channel (FACH)**
A common downlink channel without closed-loop power control used for transmission of relatively small amount of data.
- **Downlink Shared Channel (DSCH)**
A downlink channel shared by several UEs carrying dedicated control or traffic data.
- **High-speed Downlink Shared Channel (HS-DSCH)**
A downlink channel served by several UEs carrying dedicated control or traffic data. HS-DSCH offers the possibility for high-speed downlink packet access through the support of higher-order modulation, adaptive modulation and coding, fast channel-dependent scheduling, and hybrid ARQ with soft combining.
- **Broadcast Channel (BCH)**
A downlink channel used for broadcast of system information into an entire cell.
- **Paging Channel (PCH)**
A downlink channel used for broadcast of control information into an entire cell allowing efficient UE sleep mode procedures. Currently identified information types are paging and notification. Another use could be UTRAN notification of change of BCCH information.

Dedicated transport channel types are:

- **Dedicated Channel (DCH)**
A channel dedicated to one UE used in uplink or downlink.
- **Enhanced Dedicated Channel (E-DCH)**
A channel dedicated to one UE used in uplink, supporting hybrid ARQ and scheduling to provide high data rates.

On each transport channel, a number of *Transport Blocks* are delivered to/from the physical layer once every *Transmission Time Interval* (TTI). To each transport channel, there is an associated *Transport Format* or set of transport formats. The transport format describes the physical properties of the transport channel, such as the TTI, the number of transport blocks per TTI, the number of bits per transport blocks, the coding scheme and coding rate, and the modulation scheme.

For E-UTRAN, the following transport channels are defined.

Downlink transport channel types are:

- **Broadcast Channel (BCH)** characterized by:
 - fixed, pre-defined transport format;
 - requirement to be broadcast in the entire coverage area of the cell.
- **Downlink Shared Channel (DL-SCH)** characterized by:
 - support for HARQ;
 - support for dynamic link adaptation by varying the modulation, coding and transmit power;
 - possibility to be broadcast in the entire cell;
 - possibility to use beamforming;
 - support for both dynamic and semi-static resource allocation;
 - support for UE discontinuous reception (DRX) to enable UE power saving;
 - support for MBMS transmission (FFS).
- **Paging Channel (PCH)** characterized by:
 - support for UE discontinuous reception (DRX) to enable UE power saving (DRX cycle is indicated by the network to the UE);
 - requirement to be broadcast in the entire coverage area of the cell;

- mapped to physical resources which can be used dynamically also for traffic/other control channels.
- **Multicast Channel (MCH)** characterized by:
 - requirement to be broadcast in the entire coverage area of the cell;
 - support for SFN combining of MBMS transmission on multiple cells;
 - support for semi-static resource allocation e.g. with a time-frame of a long cyclic prefix.

Uplink transport channel types are:

- **Uplink Shared Channel (UL-SCH)** characterized by:
 - possibility to use beamforming (likely no impact on specifications);
 - support for dynamic link adaptation by varying the transmit power and potentially modulation and coding;
 - support for HARQ;
 - support for both dynamic and semi-static resource allocation.
- **Random Access Channel(s) (RACH)** characterized by:
 - limited control information;
 - collision risk.

5.1.1.3.2 Physical layer functionality and building blocks

The physical layer includes the following functionality:

- error detection on transport channels and indication to higher layers;
- forward error correction (FEC) encoding/decoding of transport channels;
- multiplexing of transport channels and demultiplexing of coded composite transport channels;
- rate matching;
- mapping of coded composite transport channels on physical channels;
- data modulation and demodulation of physical channels;
- spreading and de-spreading of physical channels;
- radio characteristics measurements including FER, Signal-to-Interference (SIR), Interference Power Level, etc., and indication to higher layers;
- frequency and time (chip, bit, slot, frame) synchronization;
- power weighting and combining of physical channels;
- closed-loop power control;
- RF processing;
- support of UE positioning methods;
- beamforming;
- MIMO antenna processing;
- macro-diversity distribution/combining and soft handover execution (excluding E-UTRAN).

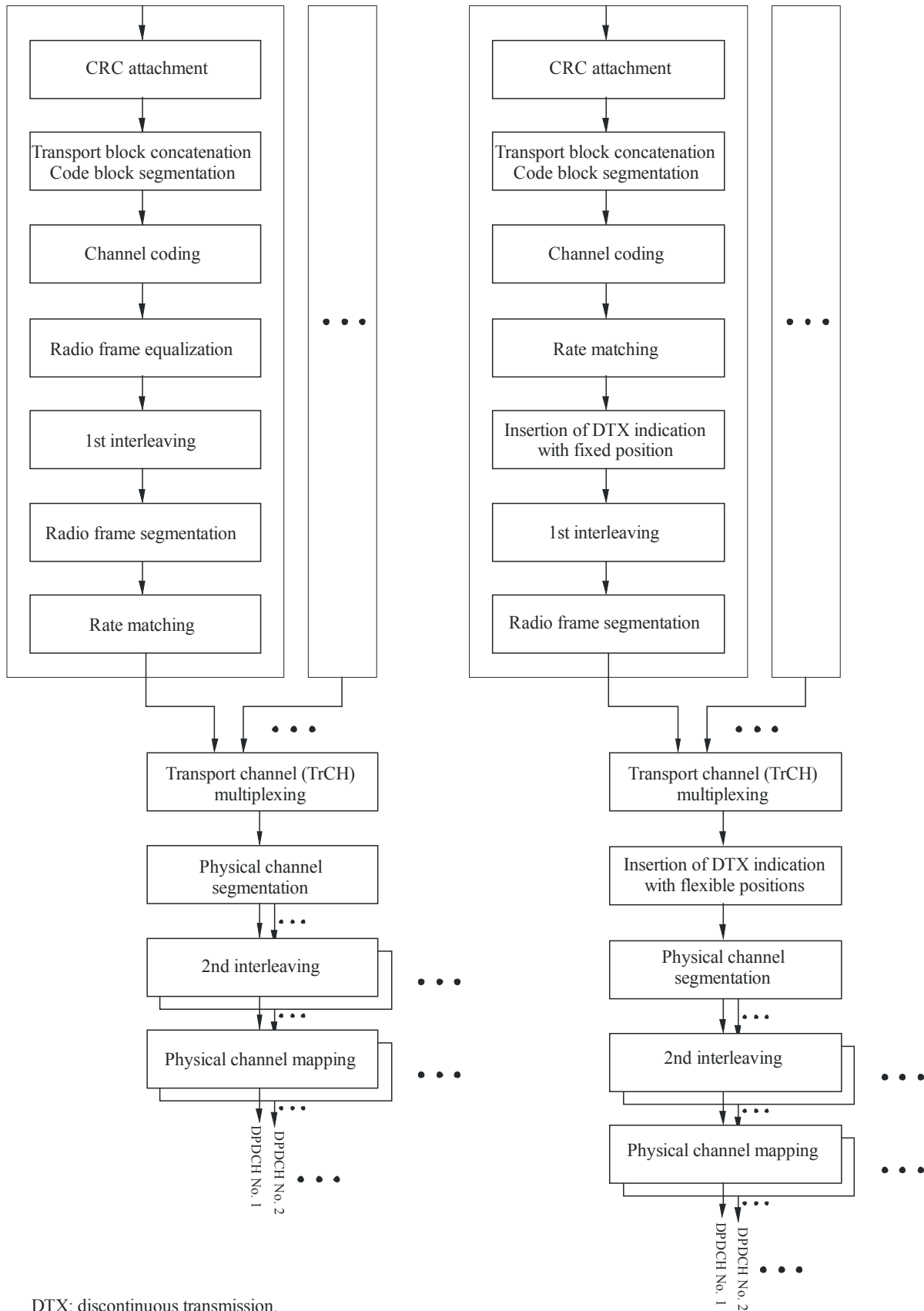
For E-UTRAN, the following functionalities are included in addition:

- frequency domain multiplexing with users;
- single frequency combining from multiple cells.

Figure 6 gives the physical layer transmission chain for the DCH transport channel. The figure shows how several transport channels can be multiplexed onto one or more dedicated physical data channels (DPDCH).

FIGURE 6

DHC transport channel multiplexing structure (left; uplink; right; downlink)



DTX: discontinuous transmission.

The cyclic redundancy check (CRC) provides for error detection of the transport blocks for the particular transport channel. The CRC can take the length zero (no CRC), 8, 12, 16 or 24 bits depending on the service requirements.

The transport block concatenation and code block segmentation functionality performs serial concatenation of those transport blocks that will be sent in one transmission time interval and any code block segmentation if necessary.

The types of channel coding defined are convolutional coding, turbo coding and no coding. Real-time services use only FEC encoding while non-real-time services use a combination of FEC and ARQ. The ARQ functionality resides in the RLC sub-layer of Layer 2. The convolutional coding rates are 1/2 or 1/3 while the rate is 1/3 for turbo codes. The possible interleaving depths are 10, 20, 40 or 80 ms.

The radio frame segmentation performs padding of bits. The rate matching adapts any remaining differences of the bit rate so the number of outgoing bits fit to the available bit rates of the physical channels. Repetition coding and/or puncturing is used for this purpose.

The transport channel multiplexing stage combines transport channels in a serial fashion. This is done every 10 ms. The output of this operation is also called coded composite transport channels.

If several physical channels will be used to transmit the data, the split is made in the physical channel segmentation unit.

The downlink can use DTX on a slot-to-slot basis for variable rate transmission. The insertions could either be at fixed or at flexible positions.

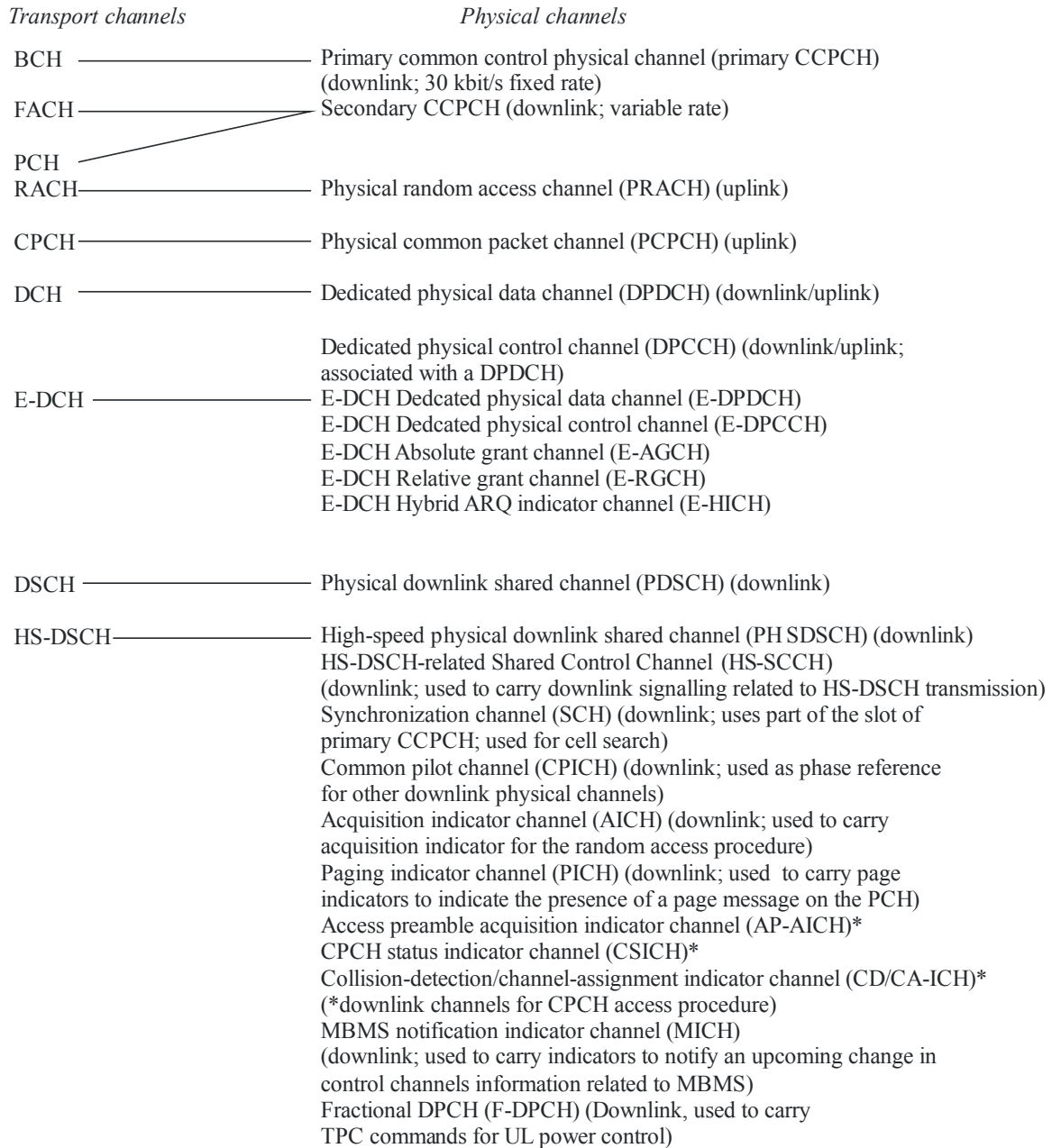
For other transport-channel types, the physical-layer transmission chain is similar although not necessarily identical to that of DCH in Fig. 6.

5.1.1.3.3 Transport channels to physical channel mapping

The transport channels are mapped onto the physical channels. Figure 7 shows the different physical channels and summarizes the mapping of transport channels onto physical channels. Each physical channel has its tailored slot content. The slot content for the uplink and downlink DPDCH/DPCCH, on to which the uplink and downlink DCH is mapped, is shown in § 5.1.1.3.4.

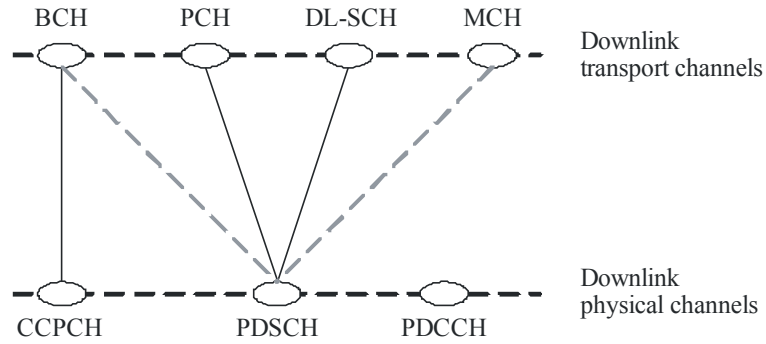
FIGURE 7

Transport channels, physical channels and their mapping



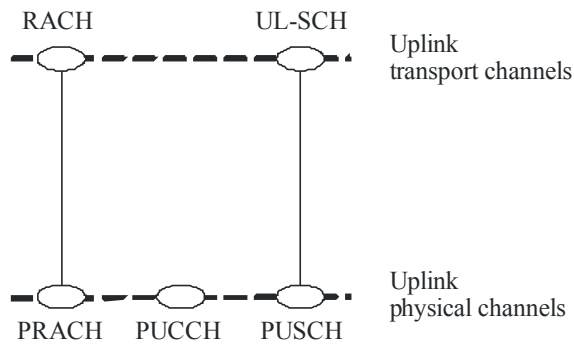
Figures 8 and 9 depict the mapping between transport and physical channels for E-UTRAN:

FIGURE 8
Mapping between downlink transport channels and downlink physical channels



M.1457-08

FIGURE 9
Mapping between uplink transport channels and uplink physical channels

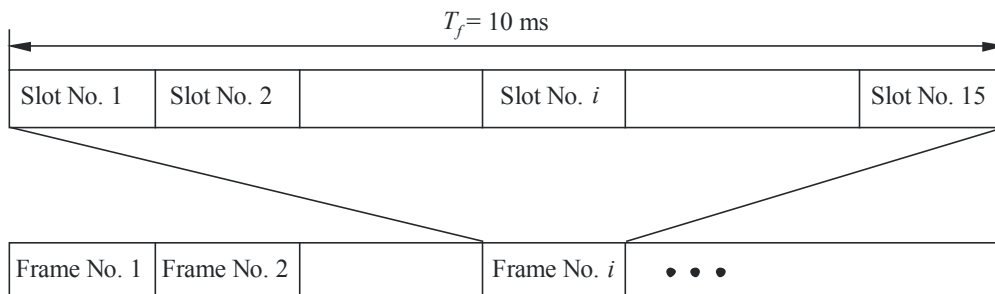


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5.1.1.3.4 Physical frame structure

The basic physical frame rate is 10 ms with 15 slots. Figure 10 shows the frame structure.

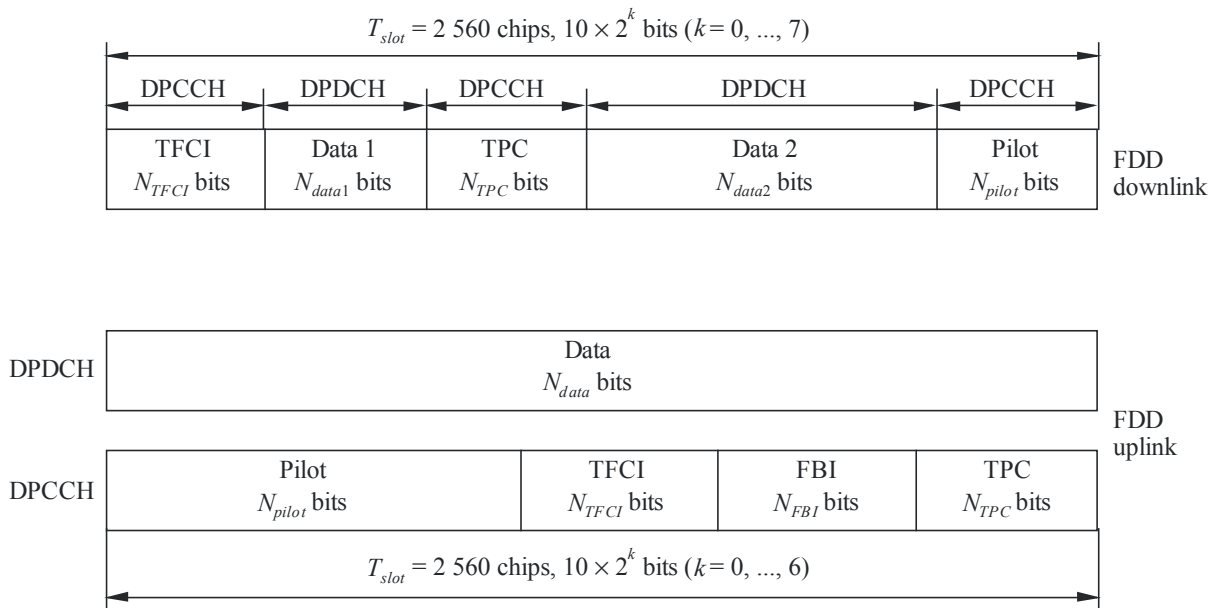
FIGURE 10
Basic frame structure



M.1457-10

Figure 11 shows the content for a slot used by the DCH. The uplink physical channels DPDCH and DPCCH are I/Q multiplexed while the downlink channels are time multiplexed. The DPDCH, the channel where the user data is transmitted on, is always associated with a DPCCH containing Layer 1 control information. The transport format combination indicator (TFCI) field is used for indicating the demultiplexing scheme of the data stream. The TFCI field does not exist for combinations that are static (i.e. fixed bit rate allocations) or blind transport format detection is employed. The feedback information (FBI) field is used for transmit and site diversity functions. The transmit power control (TPC) bits are used for power control. HSDPA has a 2 ms frame structure and E-DCH supports both a 2 ms and 10 ms frame structure with corresponding TTIs.

FIGURE 11
Slot content for the DPDC/DPCCK



M.1457-11

For the uplink, the DPDCH bit rate can vary between 15 up to 960 kbit/s using spreading factors (SFs) 256 down to 4. To obtain higher bit rates for a user several physical channels can be used. The bit rate of the DPCCH is fixed to 15 kbit/s. For the downlink the DPDCH bit rate is variable between 15 up to 1 920 kbit/s with a SF ranging from 512 down to 4. Note that the symbol bit rate is equal to the channel bit rate for the uplink while it is half of the channel bit rate for the downlink.

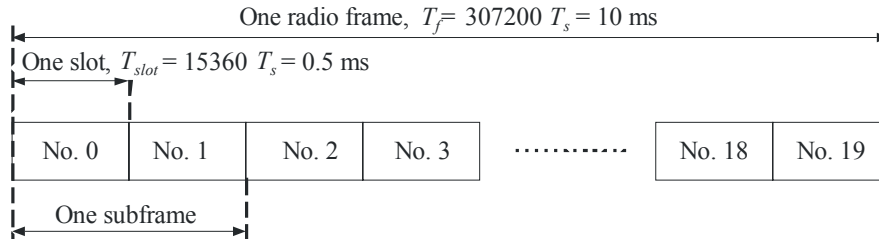
A CPICH is defined. It is an unmodulated downlink channel, that is the phase reference for other downlink physical channels. There is always one primary CPICH in each cell. There may also be additional secondary CPICHs in a cell.

To be able to support inter-frequency handover as well as measurements on other carrier frequencies or carriers of other systems, like GSM, a compressed mode of operation is defined. The function is implemented by having some slots empty, but without deleting any user data. Instead the user data is transmitted in the remaining slots. The number of slots that is not used can be variable with a minimum of three slots (giving minimum idle lengths of at least 1.73 ms). The slots can be empty either in the middle of a frame or at the end and in the beginning of the consecutive frame. If and how often is controlled by the RRC functionality in Layer 3.

E-UTRAN FDD uses a frame structure type 1. Frame structure type 1 is applicable to both full duplex and half duplex FDD. Each radio frame is $T_f = 307200 \times T_s = 100$ ms long and consists of 20 slots of length $T_{slot} = 15360 \times T_s = 0.50$ ms, numbered from 0 to 19. A subframe is defined as two consecutive slots where subframe i consists of slots $2i$ and $2i + 1$.

For FDD, 10 subframes are available for downlink transmission and 10 subframes are available for uplink transmissions in each 10 ms interval. Uplink and downlink transmissions are separated in the frequency domain.

FIGURE 12

Frame structure type 1

M.1457-12

5.1.1.3.5 Spreading, modulation and pulse shaping**Uplink**

Spreading consists of two operations. The first is the channelization operation, which transforms every data symbol into a number of chips, thus increasing the bandwidth of the signal. The number of chips per data symbol is called the SF. The second operation is the scrambling operation, where a scrambling code is applied to the spread signal.

In the channelization operation, data symbol on so-called I- and Q-branches are independently multiplied with a code. The channelization codes are orthogonal variable spreading factor (OVSF) codes that preserve the orthogonality between a user's different physical channels. With the scrambling operation, the resultant signals on the I- and Q-branches are further multiplied by complex-valued scrambling code, where I and Q denote real and imaginary parts, respectively. Note that before complex multiplication binary values 0 and 1 are mapped to 1 and -1 , respectively. Figure 13 illustrates the spreading and modulation for the case of multiple uplink DPDCHs. Note that this figure only shows the principle, and does not necessarily describe an actual implementation. Modulation is dual-channel QPSK (i.e. separate BPSK on I- and Q-channel), where the uplink DPDCH and DPCCH are mapped to the I and Q branch respectively. The I and Q branches are then spread to the chip rate with two different channelization codes and subsequently complex scrambled by a UE specific complex scrambling code C_{scramb} . There are 224 uplink-scrambling codes. Either short (256 chips from the family of S(2) codes) or long (38 400 chips equal to one frame length, gold code-based) scrambling codes is used on the uplink. The short scrambling code is typically used in cells where the BS is equipped with an advanced receiver, such as a multi-user detector or interference canceller whereas the long codes gives better interference averaging properties.

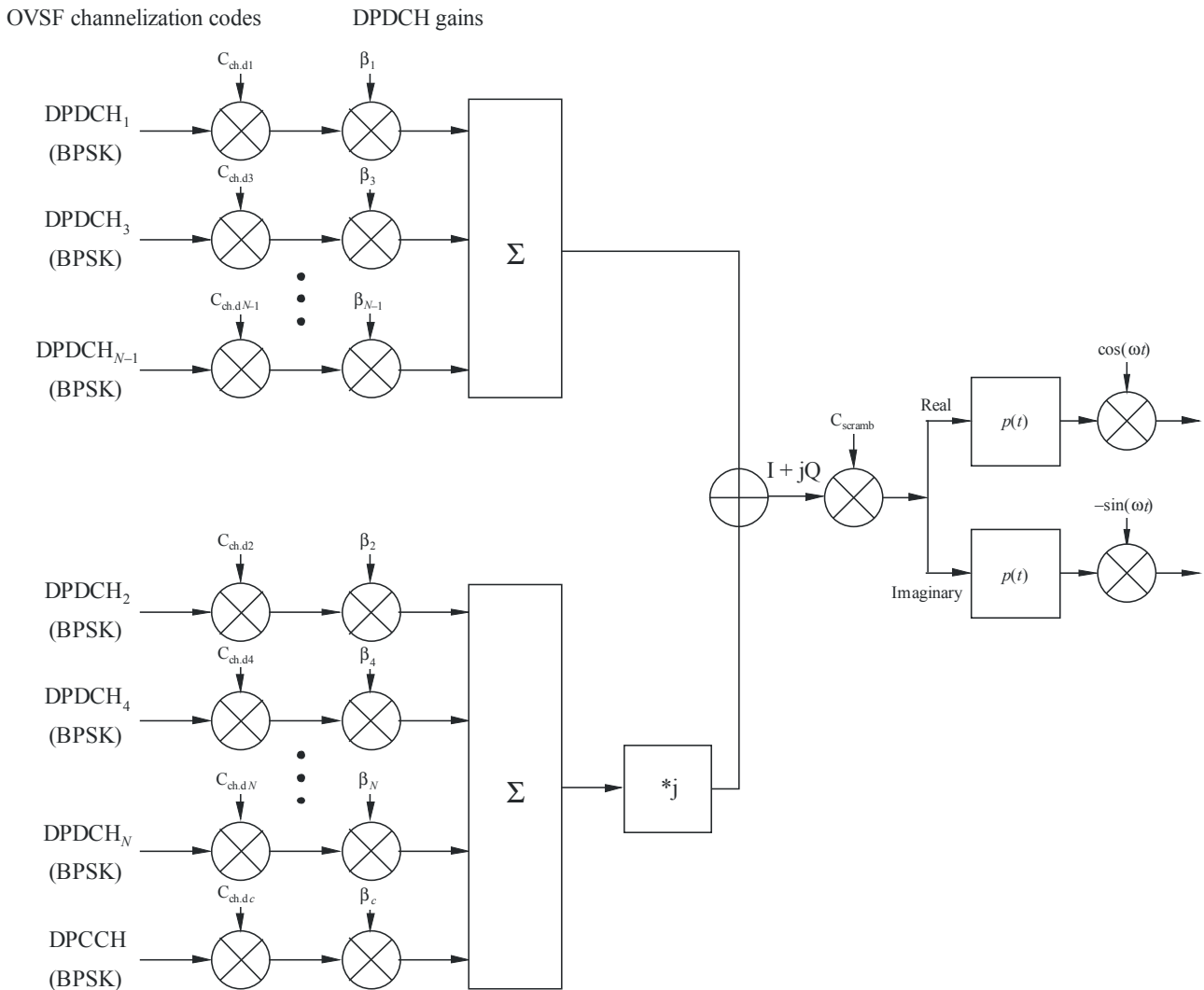
The pulse-shaping filters are root-raised cosine with roll-off $\alpha = 0.22$ in the frequency domain.

The modulation of both DPCCH and DPDCH is BPSK. The modulated DPCCH is mapped to the Q-branch, while the first DPDCH is mapped to the I-branch. Subsequently added DPDCHs are mapped alternatively to the I- or Q-branches. For the E-DPDCH, higher order modulation is supported.

In E-UTRAN, the uplink radio access scheme is based on single carrier FDMA, more specifically, DFTS-OFDM. The sub-carrier spacing is 15 kHz. The baseline antenna configuration is MU-MIMO. The modulation scheme for the uplink is up to 16-QAM and optionally 64-QAM.

FIGURE 13

Spreading/modulation for uplink DPDCH/DPCCH



M.1457-13

Downlink

Figure 14 illustrates the spreading and modulation for the downlink DPDCH/DPCCH. Data modulation is QPSK where each pair of two bits are serial-to-parallel (S/P) converted and mapped to the I- and Q-branch respectively. The I- and Q-branch are then spread to the chip rate with the same channelization code C_{ch} (real spreading) and subsequently scrambled by the scrambling code C_{scramb} (complex scrambling).

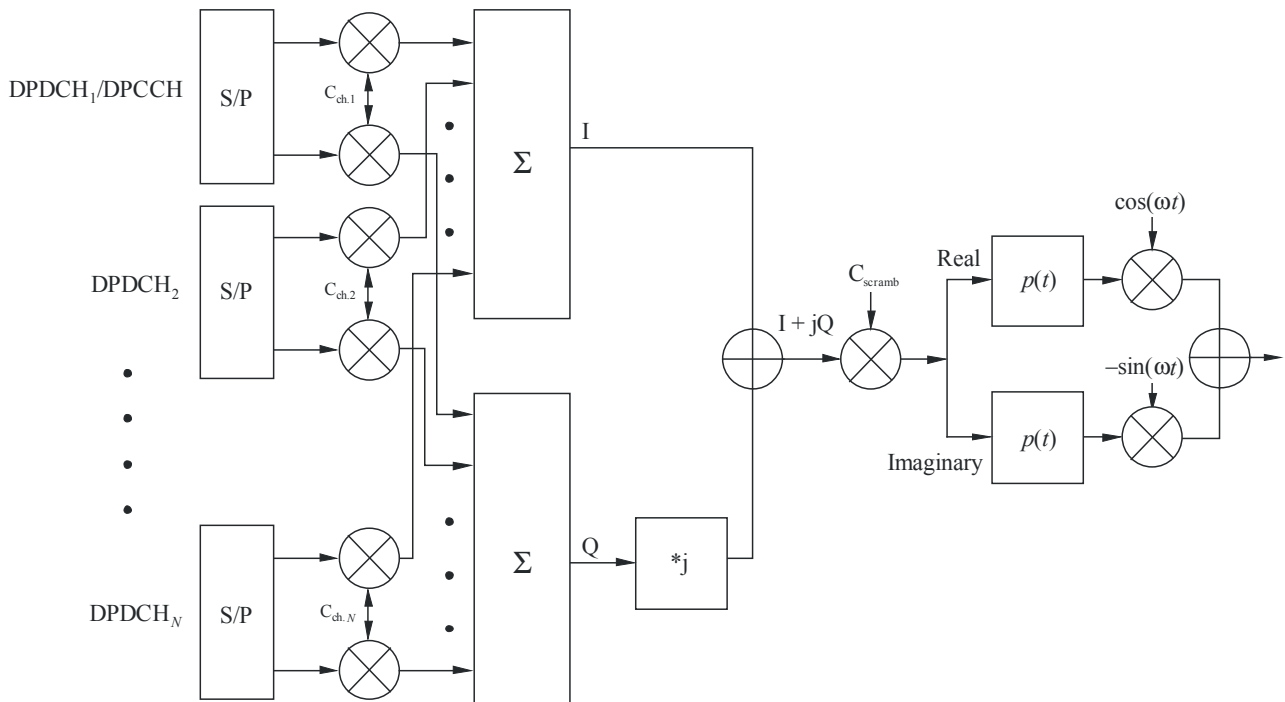
The channelization codes are the same codes as used in the uplink that preserve the orthogonality between downlink channels of different rates and SFs. There are a total of $512 \times 512 = 262\,144$ scrambling codes, numbered 0 to 262 143. The scrambling codes are divided into 512 sets each of a primary scrambling code and 511 secondary scrambling codes. Each cell is allocated one and only one primary scrambling code. The primary CCPCH is always transmitted using the primary scrambling code. The other downlink physical channels can be transmitted with either the primary scrambling code or a secondary scrambling code from the set associated with the primary scrambling code of the cell.

The pulse-shaping filters are root-raised cosine with roll-off $\alpha = 0.22$ in the frequency domain.

Downlink spreading for downlink physical channels other than the downlink DPCH is very similar. For the physical channel to which HS-DSCH is mapped, higher-order data modulation can be used in addition to QPSK.

FIGURE 14

Spreading/modulation for downlink DPDCH/DPCCH



M.1457-14

The downlink radio access scheme of E-UTRAN is based on conventional OFDM using cyclic prefix. The OFDM sub-carrier spacing is 15 kHz. In addition, there is also a reduced sub-carrier spacing of 7.5 kHz only for MBMS-dedicated cell. Single-User MIMO and Multi-User MIMO with 2 and 4 transmit antennas are supported. Peak data rates of more than 300 Mbit/s can be achieved with 20 MHz bandwidth, MIMO and higher order modulation up to 64-QAM.

5.1.1.4 Layer 2

5.1.1.4.1 MAC sub-layer

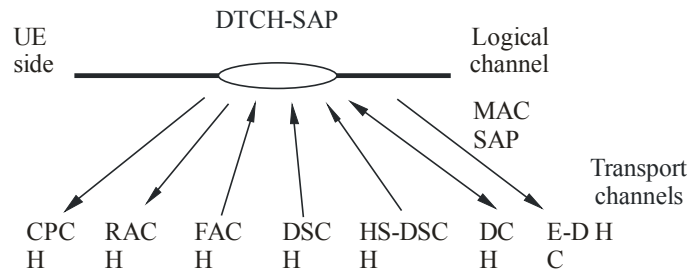
The MAC sub-layer is responsible for the handling of the data streams coming from the RLC and RRC sub-layers. It provides an unacknowledged transfer mode service to the upper layers. The interface to the RLC sub-layer is through logical channel service access points. It also re-allocates radio resources on request by the RRC sub-layer as well as provides measurements to the upper layers. The logical channels are divided into control channels and traffic channels. Thus, the functionality handles issues like:

- mapping of the different logical channels to the appropriate transport channels and selection of appropriate transport format for the transport channels based on the instantaneous source bit rate, and optimization of the HS-DSCH, DL-SCH (E-UTRA) and UL-SCH (E-UTRA) transport channel;
- multiplexing/demultiplexing of the PDUs to/from transport blocks which are thereafter further treated by the physical layer;
- dynamic switching between common and dedicated transport channels based on information from the RRC sub-layer;
- priority issues for services to one UE according to information from higher layers and physical layer (e.g. available transmit power level) as well as priority handling between UEs by means of dynamic scheduling in order to increase spectrum efficiency;
- monitoring of traffic volume that can be used by the RRC sub-layer;

- hybrid ARQ with soft combining in case of the HS-DSCH, DL-SCH (E-UTRA) or UL-SCH (E-UTRA) transport channel;
- segmentation in case improved L2 support for high data rates is used;
- Padding (E-UTRA).

Figure 15 shows the possibilities of mapping the logical dedicated traffic channel (DTCH) onto transport channels. There are possibilities to map onto common transport channels as well as dedicated transport channels. The choice of mapping could be determined on e.g. the DTCH traffic intensity.

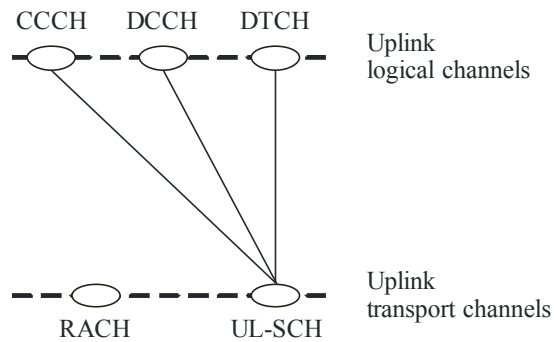
FIGURE 15
The possible transport channel mappings of the dedicated traffic channel (DTCH)
 (The arrows show the direction of the channel (UE side)
 The directions are reversed from the network side)



M.1457-15

Figures 16 and 17 similarly show the possibilities of mapping the logical channels onto transport channels for E-UTRA.

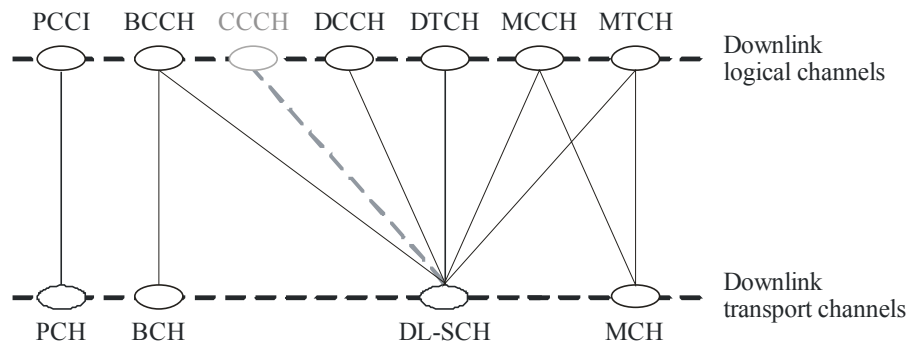
FIGURE 16
**Possible transport channel mappings of the common control channel (CCCH),
 dedicated control channel (DCCH) and dedicated
 traffic channel (DTCH)**



M.1457-16

FIGURE 17

Possible transport channel mappings of Paging Control Channel (PCCH), Broadcast Control Channel (BCCH), Common Control Channel (CCCH), Dedicated Control Channel (DCCH), Dedicated Traffic Channel (DTCH), Multicast Control Channel (MCCH), Multicast Traffic Channel (MTCH)



M.1457-17

5.1.1.4.2 RLC sub-layer

The RLC sub-layer provides three different types of data transfer modes:

- *Transparent data transfer.* This service transmits higher layer PDUs without adding any protocol information, possibly including segmentation/reassemble functionality.
- *Unacknowledged data transfer.* This service transmits higher layer PDUs without guaranteeing delivery to the peer entity. The unacknowledged data transfer mode has the following characteristics:
 - a) *Detection of erroneous data:* The RLC sub-layer shall deliver only those SDUs to the receiving higher layers that are free of transmission errors by using the sequence-number check function;
 - b) *Unique delivery:* The RLC sub-layer shall deliver each SDU only once to the receiving upper layer using duplication detection function;
 - c) *Immediate delivery:* The receiving RLC sub-layer entity shall deliver a SDU to the higher layer receiving entity as soon as it arrives at the receiver.
- *Acknowledged data transfer.* This service transmits higher layer PDUs and guarantees delivery to the peer entity. In case RLC is unable to deliver the data correctly, the user of RLC at the transmitting side is notified. For this service, both in-sequence and out-of-sequence delivery are supported. In many cases a higher layer protocol can restore the order of its PDUs. As long as the out-of-sequence properties of the lower layer are known and controlled (i.e. the higher layer protocol will not immediately request retransmission of a missing PDU) allowing out-of-sequence delivery can save memory space in the receiving RLC. The acknowledged data transfer mode has the following characteristics:
 - a) *Error-free delivery:* error-free delivery is ensured by means of retransmission. The receiving RLC entity delivers only error-free SDUs to the higher layer;
 - b) *Unique delivery:* the RLC sub-layer shall deliver each SDU only once to the receiving upper layer using duplication detection function;
 - c) *In-sequence delivery:* RLC sub-layer shall provide support for in-order delivery of SDUs, i.e. RLC sub-layer should deliver SDUs to the receiving higher layer entity in the same order as the transmitting higher layer entity submits them to the RLC sub-layer;
 - d) *Out-of-sequence delivery:* alternatively to in-sequence delivery, it shall also be possible to allow that the receiving RLC entity delivers SDUs to higher layer in different order than submitted to RLC sub-layer at the transmitting side.

It also provides for RLC connection establishment/release. As well as QoS setting and notification to higher layers in case of unrecoverable errors.

An example of the data flow for non-transparent (acknowledged/unacknowledged) data transfer is shown in Fig. 3.

5.1.1.4.3 PDCP sub-layer

PDCP provides transmission and reception of Network PDUs in acknowledged, unacknowledged and transparent RLC mode.

It is responsible for the mapping of Network PDUs from one network protocol to one RLC entity and it provides compression in the transmitting entity and decompression in the receiving entity of redundant Network PDU control information (header compression/ decompression).

For E-UTRAN, PDCP is also responsible for in-sequence delivery of upper layer PDUs at hand-over, duplicate detection of lower layer SDUs and retransmission of PDCP SDUs at handover.

5.1.1.4.4 BMC sub-layer

The BMC provides a broadcast/multicast transmission service in the user plane on the radio interface for common user data in transparent or unacknowledged mode.

It can handle functionalities such as storage, scheduling and transmission of BMC messages.

5.1.1.5 Layer 3 (RRC sub-layer)

The RRC sub-layer handles the control plane signalling of Layer 3 between the UEs and the radio interface. In addition to the relation with the upper layers (such as CN) the following main functions are performed:

- *Broadcast of information provided by the non-access stratum (CN)* – The RRC layer performs system information broadcasting from the network to all UEs. The system information is normally repeated on a regular basis. This function supports broadcast of higher layer (above RRC) information. This information may be cell specific or not. As an example RRC may broadcast CN location service area information related to some specific cells.
- *Broadcast of information related to the access stratum* – The RRC layer performs system information broadcasting from the network to all UEs. This function supports broadcast of typically cell-specific information.
- *Establishment, maintenance and release of an RRC connection between the UE and the radio access network* – The establishment of an RRC connection is initiated by a request from higher layers at the UE side to establish the first signalling connection for the UE. The establishment of an RRC connection includes an optional cell re-selection, an admission control, and a Layer 2 signalling link establishment.
- *Establishment, reconfiguration and release of radio access bearers* – The RRC layer will, on request from higher layers, perform the establishment, reconfiguration and release of radio access bearers in the user plane. A number of radio access bearers can be established to an UE at the same time. At establishment and reconfiguration, the RRC layer performs admission control and selects parameters describing the radio access bearer processing in Layer 2 and Layer 1, based on information from higher layers.
- *Assignment, reconfiguration and release of radio resources for the RRC connection* – The RRC layer handles the assignment of radio resources (e.g. codes) needed for the RRC connection including needs from both the control and user plane. The RRC layer may reconfigure radio resources during an established RRC connection. This function includes coordination of the radio resource allocation between multiple radio bearers related to the same RRC connection. RRC controls the radio resources in the uplink and downlink such that UE and the radio access network can communicate using unbalanced radio resources (asymmetric uplink and downlink). RRC signals to the UE to indicate resource allocations for purposes of handover to GSM or other radio systems.
- *RRC connection mobility functions* – The RRC layer performs evaluation, decision and execution related to RRC connection mobility during an established RRC connection, such as handover, preparation of handover to GSM or other systems, cell re-selection and cell/paging area update procedures, based on e.g. measurements done by the UE.

- *Paging/notification* – The RRC layer can broadcast paging information from the network to selected UEs. The RRC layer can also initiate paging during an established RRC connection.
- *Control of requested QoS* – This function ensures that the QoS requested for the radio access bearers can be met. This includes the allocation of a sufficient number of radio resources.
- *UE measurement reporting and control of the reporting* – The measurements performed by the UE are controlled by the RRC layer, in terms of what to measure, when to measure and how to report, including both this radio interface and other systems. The RRC layer also performs the reporting of the measurements from the UE to the network.
- *Outer loop power control* – The RRC layer controls setting of the target of the closed-loop power control.
- *Control of ciphering* – The RRC layer provides procedures for setting of ciphering (on/off) between the UE and the radio access network.
- *Initial cell selection and re-selection in idle mode* – Selection of the most suitable cell based on idle mode measurements and cell selection criteria.
- *Arbitration of the radio resource allocation between the cells* – This function shall ensure optimal performance of the overall radio access network capacity.

5.1.1.6 Summary of major technical parameters

Parameter	Value	Reference to § 5.1.2
Multiple access technique and duplexing scheme	Multiple access: DS-CDMA (E-UTRAN) OFDM in DL. SC-FDMA in UL Duplexing: FDD	5.1.2.1.1 5.1.2.3.1
Chip rate (Mchip/s)	3.84	5.1.2.1.4
Frame length and structure	Frame length: 10 ms (E-UTRAN) Sub-frame length: 1 ms (E-UTRAN) Slot length: 10/15 ms. (E-UTRAN) 0.5 ms TTI: 10 ms, 20 ms, 40 ms, 80 ms, 2 ms (E-UTRAN) 1 ms	5.1.2.1.2 5.1.2.3.1
Occupied bandwidth	Less than 5 MHz (E-UTRAN) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz and 20 MHz	5.1.2.5.1, 5.1.2.5.4 5.1.2.3.1
Adjacent channel leakage power ratio (ACLR) (transmitter side)	UE (UE power class; 21 dBm and 24 dBm): ACLR (5 MHz) = 33 dB ACLR (10 MHz) = 43 dB BS: ACLR (5 MHz) = 45 dB ACLR (10 MHz) = 50 dB	5.1.2.5.1 5.1.2.5.4
Adjacent channel selectivity (ACS) (receiver side)	UE: ACS (5 MHz) = 33 dB BS: ACS (5 MHz) = 45 dB	5.1.2.5.1 5.1.2.5.4
Random access mechanism	Acquisition indication based random-access mechanism with power ramping on preamble followed by message	5.1.2.1.2 5.1.2.1.5
Pilot structure	Uplink: dedicated pilots Downlink: common and/or dedicated pilots	5.1.2.1.2
Inter-base station asynchronous/synchronous operation	Asynchronous; synchronous	5.1.2.1.5 5.1.2.5.4

5.1.2 Detailed specification of the radio interface

The standards contained in this section are derived from the global core specifications for IMT_2000 contained at <http://ties.itu.int/u/itu-r/ede/rsg5/IMT-2000/GCS/GCSrev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their Web site.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

5.1.2.1 25.200 series

5.1.2.1.1 TS 25.201

Physical layer – General description

This specification gives a general description of the physical layer of the UTRA radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.201	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25201-340.pdf
ATIS	T1.3GPP.25.201V340-2003	3.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.201	3.4.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 201	3.4.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v340
TTA	TTAT.3G-25.201(R99-3.4.0)	3.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R99-3.4.0)
Release 4					
ARIB	ARIB STD-T63-25.201	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25201-430.pdf
ATIS	T1.3GPP.25.201V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.201	4.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 201	4.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v430
TTA	TTAT.3G-25.201(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-25.201	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25201-530.pdf
ATIS	ATIS.3GPP.25.201V530-2006	5.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.201	5.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 201	5.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v530
TTA	TTAT.3G-25.201(R5-5.3.0)	5.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R5-5.3.0)
Release 6					
ARIB	ARIB STD-T63-25.201	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25201-620.pdf
ATIS	ATIS.3GPP.25.201V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.201	6.2.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 201	6.2.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v620
TTA	TTAT.3G-25.201(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-25.201	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25201-750.pdf
ATIS	ATIS.3GPP.25.201V750-2008	7.5.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.201	7.5.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 201	7.5.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v750
TTA	TTAT.3G-25.201(R7-7.5.0)	7.5.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-25.201	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25201-810.pdf
ATIS	ATIS.3GPP.25.201V810-2008	8.1.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.201	8.1.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 201	8.1.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v810
TTA	TTAT.3G-25.201(R8-8.1.0)	8.1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R8-8.1.0)

5.1.2.1.2 TS 25.211**Physical channels and mapping of transport channels onto physical channels (FDD)**

This specification describes the characteristics of the Layer 1 transport channels and physical channels in the FDD mode of UTRA. The main objectives of the specification are to be a part of the full description of the UTRA Layer 1, and to serve as a basis for the drafting of the actual technical specification (TS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.211	3.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25211-3c0.pdf
ATIS	T1.3GPP.25.211V3120-2003	3.12.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.211	3.12.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 211	3.12.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125211v3c0
TTA	TTAT.3G-25.211(R99F-3120)	3.12.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.211(R99F-3120)
Release 4					
ARIB	ARIB STD-T63-25.211	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25211-460.pdf
ATIS	T1.3GPP.25.211V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.211	4.6.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 211	4.6.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125211v460
TTA	TTAT.3G-25.211(R4F-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.211(R4F-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.211	5.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25211-580.pdf
ATIS	ATIS.3GPP.25.211V580-2006	5.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.211	5.8.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 211	5.8.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125211v580
TTA	TTAT.3G-25.211(R5F-5.8.0)	5.8.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.211(R5F-5.8.0)
Release 6					
ARIB	ARIB STD-T63-25.211	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25211-690.pdf
ATIS	ATIS.3GPP.25.211V690-2008	6.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.211	6.9.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 211	6.9.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125211v690
TTA	TTAT.3G-25.211(R6F-6.9.0)	6.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.211(R6F-6.9.0)

Release 7

ARIB	ARIB STD-T63-25.211	7.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25211-770.pdf
ATIS	ATIS.3GPP.25.211V770-2009	7.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.211	7.7.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 211	7.7.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125211v770
TTA	TTAT.3G-25.211(R7F-7.7.0)	7.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.211(R7F-7.7.0)

Release 8

ARIB	ARIB STD-T63-25.211	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25211-840.pdf
ATIS	ATIS.3GPP.25.211V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.211	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 211	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125211v840
TTA	TTAT.3G-25.211(R8F-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.211(R8F-8.4.0)

5.1.2.1.3 TS 25.212**Multiplexing and channel coding (FDD)**

This specification describes the characteristics of the Layer 1 multiplexing and channel coding in the FDD mode of UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.212	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25212-3b0.pdf
ATIS	T1.3GPP.25.212V3110-2003	3.11.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.212	3.11.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 212	3.11.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125212v3b0
TTA	TTAT.3G-25.212(R99F-3110)	3.11.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.212(R99F-3110)
Release 4					
ARIB	ARIB STD-T63-25.212	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25212-460.pdf
ATIS	T1.3GPP.25.212V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.212	4.6.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 212	4.6.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125212v460
TTA	TTAT.3G-25.212(R4F-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.212(R4F-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.212	5.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25212-5a0.pdf
ATIS	ATIS.3GPP.25.212V5100-2006	5.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.212	5.10.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 212	5.10.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125212v5a0
TTA	TTAT.3G-25.212(R5F-5.10.0)	5.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.212(R5F-5.10.0)
Release 6					
ARIB	ARIB STD-T63-25.212	6.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25212-6a0.pdf
ATIS	ATIS.3GPP.25.212V6100-2007	6.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.212	6.10.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 212	6.10.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125212v6a0
TTA	TTAT.3G-25.212(R6F-6.10.0)	6.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.212(R6F-6.10.0)

Release 7

ARIB	ARIB STD-T63-25.212	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25212-7a0.pdf
ATIS	ATIS.3GPP.25.212V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.212	7.10.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 212	7.10.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125212v7a0
TTA	TTAT.3G-25.212(R7F-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.212(R7F-7.10.0)

Release 8

ARIB	ARIB STD-T63-25.212	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25212-850.pdf
ATIS	ATIS.3GPP.25.212V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.212	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 212	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125212v850
TTA	TTAT.3G-25.212(R8F-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.212(R8F-8.5.0)

5.1.2.1.4 TS 25.213**Spreading and modulation (FDD)**

This specification describes spreading and modulation for UTRA physical layer FDD mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.213	3.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25213-390.pdf
ATIS	T1.3GPP.25.213V390-2004	3.9.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.213	3.9.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 213	3.9.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125213v390
TTA	TTAT.3G-25.213(R99F-3.9.0)	3.9.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.213(R99F-3.9.0)
Release 4					
ARIB	ARIB STD-T63-25.213	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25213-440.pdf
ATIS	T1.3GPP.25.213V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.213	4.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 213	4.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125213v440
TTA	TTAT.3G-25.213(R4F-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.213(R4F-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.213	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25213-560.pdf
ATIS	ATIS.3GPP.25.213V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.213	5.6.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 213	5.6.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125213v560
TTA	TTAT.3G-25.213(R5F-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.213(R5F-5.6.0)
Release 6					
ARIB	ARIB STD-T63-25.213	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25213-650.pdf
ATIS	ATIS.3GPP.25.213V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.213	6.5.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 213	6.5.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125213v650
TTA	TTAT.3G-25.213(R6F-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.213(R6F-6.5.0)

Release 7

ARIB	ARIB STD-T63-25.213	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25213-760.pdf
ATIS	ATIS.3GPP.25.213V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.213	7.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 213	7.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125213v760
TTA	TTAT.3G-25.213(R7F-7.6.0)	7.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.213(R7F-7.6.0)

Release 8

ARIB	ARIB STD-T63-25.213	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25213-840.pdf
ATIS	ATIS.3GPP.25.213V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.213	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 213	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125213v840
TTA	TTAT.3G-25.213(R8F-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.213(R8F-8.4.0)

5.1.2.1.5 TS 25.214**Physical layer procedures (FDD)**

This specification describes and establishes the characteristics of the physical layer procedures in the FDD mode of UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.214	3.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25214-3c0.pdf
ATIS	T1.3GPP.25.214V3120-2004	3.12.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.214	3.12.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 214	3.12.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125214v3c0
TTA	TTAT.3G-25.214(R99F-3.12.0)	3.12.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.214(R99F-3.12.0)
Release 4					
ARIB	ARIB STD-T63-25.214	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25214-460.pdf
ATIS	T1.3GPP.25.214V460-2004	4.6.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.214	4.6.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 214	4.6.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125214v460
TTA	TTAT.3G-25.214(R4F-4.6.0)	4.6.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.214(R4F-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.214	5.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25214-5b0.pdf
ATIS	ATIS.3GPP.25.214V5110-2006	5.11.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.214	5.11.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 214	5.11.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125214v5b0
TTA	TTAT.3G-25.214(R5F-5.11.0)	5.11.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.214(R5F-5.11.0)
Release 6					
ARIB	ARIB STD-T63-25.214	6.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25214-6b0.pdf
ATIS	ATIS.3GPP.25.214V6110-2007	6.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.214	6.11.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 214	6.11.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125214v6b0
TTA	TTAT.3G-25.214(R6F-6.11.0)	6.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.214(R6F-6.11.0)

Release 7

ARIB	ARIB STD-T63-25.214	7.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25214-7b0.pdf
ATIS	ATIS.3GPP.25.214V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.214	7.11.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 214	7.11.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125214v7b0
TTA	TTAT.3G-25.214(R7F-7.11.0)	7.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.214(R7F-7.11.0)

Release 8

ARIB	ARIB STD-T63-25.214	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25214-850.pdf
ATIS	ATIS.3GPP.25.214V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.214	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 214	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125214v850
TTA	TTAT.3G-25.214(R8F-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.214(R8F-8.5.0)

5.1.2.1.6 TS 25.215**Physical layer – Measurements (FDD)**

This specification describes the measurements done at the UE and network in order to support operation in idle mode and connected mode for FDD mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.215	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25215-3d0.pdf
ATIS	ATIS.3GPP.25.215V3130-2006	3.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.215	3.13.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 215	3.13.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125215v3d0
TTA	TTAT.3G-25.215(R99F-3.13.0)	3.13.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.215(R99F-3.13.0)
Release 4					
ARIB	ARIB STD-T63-25.215	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25215-480.pdf
ATIS	ATIS.3GPP.25.215V480-2005	4.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.215	4.8.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 215	4.8.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125215v480
TTA	TTAT.3G-25.215(R4F-4.8.0)	4.8.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.215(R4F-4.8.0)
Release 5					
ARIB	ARIB STD-T63-25.215	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25215-570.pdf
ATIS	ATIS.3GPP.25.215V570-2006	5.7.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.215	5.7.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 215	5.7.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125215v570
TTA	TTAT.3G-25.215(R5F-5.7.0)	5.7.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.215(R5F-5.7.0)
Release 6					
ARIB	ARIB STD-T63-25.215	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25215-640.pdf
ATIS	ATIS.3GPP.25.215V640-2006	6.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.215	6.4.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 215	6.4.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125215v640
TTA	TTAT.3G-25.215(R6F-6.4.0)	6.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.215(R6F-6.4.0)

Release 7

ARIB	ARIB STD-T63-25.215	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25215-740.pdf
ATIS	ATIS.3GPP.25.215V740-2008	7.4.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.215	7.4.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 215	7.4.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125215v740
TTA	TTAT.3G-25.215(R7F-7.4.0)	7.4.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.215(R7F-7.4.0)

Release 8

ARIB	ARIB STD-T63-25.215	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25215-830.pdf
ATIS	ATIS.3GPP.25.215V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.215	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 215	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125215v830
TTA	TTAT.3G-25.215(R8F-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.215(R8F-8.3.0)

5.1.2.2 25.300 series

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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5.1.2.2.1 TS 25.301**Radio interface protocol architecture**

This specification describes an overview and overall description of the UE-UTRAN radio interface protocol architecture. Details of the radio protocols will be specified in companion documents.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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Release 99

ARIB	ARIB STD-T63-25.301	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25301-3b0.pdf
ATIS	T1.3GPP.25.301V3110-2003	3.11.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.301	3.11.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 301	3.11.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v3b0
TTA	TTAT.3G-25.301(R99-3.11.0)	3.11.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R99-3.11.0)

Release 4

ARIB	ARIB STD-T63-25.301	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25301-440.pdf
ATIS	T1.3GPP.25.301V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.301	4.4.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 301	4.4.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v440
TTA	TTAT.3G-25.301(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R4-4.4.0)

Release 5

ARIB	ARIB STD-T63-25.301	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25301-560.pdf
ATIS	ATIS.3GPP.25.301V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.301	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 301	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v560
TTA	TTAT.3G-25.301(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-25.301	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25301-660.pdf
ATIS	ATIS.3GPP.25.301V660-2008	6.6.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.301	6.6.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 301	6.6.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v660
TTA	TTAT.3G-25.301(R6-6.6.0)	6.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R6-6.6.0)

Release 7

ARIB	ARIB STD-T63-25.301	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25301-740.pdf
ATIS	ATIS.3GPP.25.301V740-2008	7.4.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.301	7.4.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 301	7.4.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v740
TTA	TTAT.3G-25.301(R7-7.4.0)	7.4.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R7-7.4.0)

Release 8

ARIB	ARIB STD-T63-25.301	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25301-850.pdf
ATIS	ATIS.3GPP.25.301V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.301	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 301	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v850
TTA	TTAT.3G-25.301(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R8-8.5.0)

5.1.2.2.2 TS 25.302**Services provided by the physical layer**

This specification describes a technical specification of the services provided by the physical layer of UTRA to upper layers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.302	3.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25302-3g0.pdf
ATIS	T1.3GPP.25.302V3160-2004	3.16.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.302	3.16.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 302	3.16.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v3g0
TTA	TTAT.3G-25.302(R99-3.16.0)	3.16.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R99-3.16.0)
Release 4					
ARIB	ARIB STD-T63-25.302	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25302-480.pdf
ATIS	T1.3GPP.25.302V480-2004	4.8.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.302	4.8.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 302	4.8.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v480
TTA	TTAT.3G-25.302(R4-4.8.0)	4.8.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R4-4.8.0)
Release 5					
ARIB	ARIB STD-T63-25.302	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25302-590.pdf
ATIS	ATIS.3GPP.25.302V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.302	5.9.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 302	5.9.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v590
TTA	TTAT.3G-25.302(R5-5.9.0)	5.9.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-25.302	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25302-680.pdf
ATIS	ATIS.3GPP.25.302V680-2007	6.8.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.302	6.8.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 302	6.8.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v680
TTA	TTAT.3G-25.302(R6-6.8.0)	6.8.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R6-6.8.0)

Release 7

ARIB	ARIB STD-T63-25.302	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25302-760.pdf
ATIS	ATIS.3GPP.25.302V760-2008	7.6.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.302	7.6.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 302	7.6.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v760
TTA	TTAT.3G-25.302(R7-7.6.0)	7.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R7-7.6.0)

Release 8

ARIB	ARIB STD-T63-25.302	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25302-820.pdf
ATIS	ATIS.3GPP.25.302V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.302	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 302	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v820
TTA	TTAT.3G-25.302(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R8-8.2.0)

5.1.2.2.3 TS 25.303**Interlayer procedures in connected mode**

This specification describes informative interlayer procedures to perform the required tasks. This specification attempts to provide a comprehensive overview of the different states and transitions within the connected mode of universal mobile telecommunications system (UMTS) terminal.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.303	3.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25303-3c0.pdf
ATIS	T1.3GPP.25.303V3120-2003	3.12.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.303	3.12.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 303	3.12.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v3c0
TTA	TTAT.3G-25.303(R99-3.12.0)	3.12.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R99-3.12.0)
Release 4					
ARIB	ARIB STD-T63-25.303	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25303-450.pdf
ATIS	T1.3GPP.25.303V450-2003	4.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.303	4.5.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 303	4.5.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v450
TTA	TTAT.3G-25.303(R4-4.5.0)	4.5.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R4-4.5.0)
Release 5					
ARIB	ARIB STD-T63-25.303	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25303-530.pdf
ATIS	ATIS.3GPP.25.303V530-2006	5.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.303	5.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 303	5.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v530
TTA	TTAT.3G-25.303(R5-5.3.0)	5.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R5-5.3.0)

Release 6

ARIB	ARIB STD-T63-25.303	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25303-630.pdf
ATIS	ATIS.3GPP.25.303V630-2006	6.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.303	6.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 303	6.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v630
TTA	TTAT.3G-25.303(R6-6.3.0)	6.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R6-6.3.0)

Release 7

ARIB	ARIB STD-T63-25.303	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25303-700.pdf
ATIS	ATIS.3GPP.25.303V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.303	7.0.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 303	7.0.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v700
TTA	TTAT.3G-25.303(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-25.303	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25303-800.pdf
ATIS	ATIS.3GPP.25.303V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.303	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 303	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v800
TTA	TTAT.3G-25.303(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R8-8.0.0)

5.1.2.2.4 TS 25.304**UE procedures in idle mode and procedures for cell reselection in connected mode**

This specification describes the overall idle mode process for the UE and the functional division between the non-access stratum and access stratum in the UE. The UE is in idle mode when the connection of the UE is closed on all layers, e.g. there is neither an MM connection nor an RRC connection. This specification presents also examples of inter-layer procedures related to the idle mode processes and describes idle mode functionality of a dual mode UMTS/GSM UE.

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Release 99					
ARIB	ARIB STD-T63-25.304	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25304-3e0.pdf
ATIS	ATIS.3GPP.25.304V3140-2005	3.14.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.304	3.14.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 304	3.14.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v3e0
TTA	TTAT.3G-25.304(R99-3.14.0)	3.14.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R99-3.14.0)
Release 4					
ARIB	ARIB STD-T63-25.304	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25304-480.pdf
ATIS	ATIS.3GPP.25.304V480-2005	4.8.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.304	4.8.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 304	4.8.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v480
TTA	TTAT.3G-25.304(R4-4.8.0)	4.8.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R4-4.8.0)

Release 5

ARIB	ARIB STD-T63-25.304	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25304-590.pdf
ATIS	ATIS.3GPP.25.304V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.304	5.9.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 304	5.9.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v590
TTA	TTAT.3G-25.304(R5-5.9.0)	5.9.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-25.304	6.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25304-6a0.pdf
ATIS	ATIS.3GPP.25.304V6100-2008	6.10.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.304	6.10.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 304	6.10.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v6a0
TTA	TTAT.3G-25.304(R6-6.10.0)	6.10.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R6-6.10.0)

Release 7

ARIB	ARIB STD-T63-25.304	7.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25304-770.pdf
ATIS	ATIS.3GPP.25.304V770-2009	7.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.304	7.7.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 304	7.7.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v770
TTA	TTAT.3G-25.304(R7-7.7.0)	7.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R7-7.7.0)

Release 8

ARIB	ARIB STD-T63-25.304	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25304-850.pdf
ATIS	ATIS.3GPP.25.304V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.304	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 304	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v850
TTA	TTAT.3G-25.304(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R8-8.5.0)

5.1.2.2.5 TS 25.305**Stage 2 Functional Specification of UE positioning in UTRAN (LCS)**

This document specifies the Stage 2 of the UE Positioning function of UTRAN, which provides the mechanisms to support the calculation of the geographical position of a UE.

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Release 99					
ARIB	ARIB STD-T63-25.305	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25305-3b0.pdf
ATIS	T1.3GPP.25.305V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.305	3.11.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 305	3.11.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v3b0
TTA	TTAT.3G-25.305(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.305	4.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25305-470.pdf
ATIS	T1.3GPP.25.305V470-2004	4.7.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.305	4.7.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 305	4.7.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v470
TTA	TTAT.3G-25.305(R4-4.7.0)	4.7.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R4-4.7.0)

Release 5

ARIB	ARIB STD-T63-25.305	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25305-590.pdf
ARIB	ARIB STD-T63-25.305	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25305-590.pdf
ATIS	ATIS.3GPP.25.305V590-2005	5.9.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.305	5.9.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 305	5.9.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v590
TTA	TTAT.3G-25.305(R5-5.9.0)	5.9.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-25.305	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25305-610.pdf
ATIS	ATIS.3GPP.25.305V610-2005	6.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.305	6.1.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 305	6.1.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v610
TTA	TTAT.3G-25.305(R6-6.1.0)	6.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R6-6.1.0)

Release 7

ARIB	ARIB STD-T63-25.305	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25305-740.pdf
ATIS	ATIS.3GPP.25.305V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.305	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 305	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v740
TTA	TTAT.3G-25.305(R7-7.4.0)	7.4.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R7-7.4.0)

Release 8

ARIB	ARIB STD-T63-25.305	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25305-810.pdf
ATIS	ATIS.3GPP.25.305V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.305	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 305	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v810
TTA	TTAT.3G-25.305(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R8-8.1.0)

5.1.2.2.6 TS 25.306**UE Radio Access capabilities definition**

This document identifies the parameters of the access stratum part of the UE radio access capabilities. Furthermore, some reference configurations of these values are defined. The intention is that these configurations will be used for test specifications.

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Release 99					
ARIB	ARIB STD-T63-25.306	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25306-3a0.pdf
ATIS	T1.3GPP.25.306V3100-2004	3.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.306	3.10.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 306	3.10.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v3a0
TTA	TTAT.3G-25.306(R99-3.10.0)	3.10.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R99-3.10.0)

Release 4

ARIB	ARIB STD-T63-25.306	4.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25306-4b0.pdf
ATIS	ATIS.3GPP.25.306V4110-2009	4.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.306	4.11.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 306	4.11.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v4b0
TTA	TTAT.3G-25.306(R4-4.11.0)	4.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R4-4.11.0)

Release 5

ARIB	ARIB STD-T63-25.306	5.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25306-5f0.pdf
ATIS	ATIS.3GPP.25.306V5150-2009	5.15.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.306	5.15.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 306	5.15.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v5f0
TTA	TTAT.3G-25.306(R5-5.15.0)	5.15.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R5-5.15.0)

Release 6

ARIB	ARIB STD-T63-25.306	6.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25306-6d0.pdf
ATIS	ATIS.3GPP.25.306V6130-2009	6.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.306	6.13.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 306	6.13.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v6d0
TTA	TTAT.3G-25.306(R6-6.13.0)	6.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R6-6.13.0)

Release 7

ARIB	ARIB STD-T63-25.306	7.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25306-790.pdf
ATIS	ATIS.3GPP.25.306V790-2009	7.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.306	7.9.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 306	7.9.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v790
TTA	TTAT.3G-25.306(R7-7.9.0)	7.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R7-7.9.0)

Release 8

ARIB	ARIB STD-T63-25.306	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25306-860.pdf
ATIS	ATIS.3GPP.25.306V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.306	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 306	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v860
TTA	TTAT.3G-25.306(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R8-8.6.0)

5.1.2.2.7 S 25.307**Requirements on UE supporting a release-independent frequency band**

This document specifies requirements on UEs supporting a frequency band that is independent of release.

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Release 99					
ARIB	ARIB STD-T63-25.307	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25307-3b0.pdf
ATIS	ATIS.3GPP.25.307V3110-2008	3.11.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.307	3.11.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 307	3.11.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v3b0
TTA	TTAT.3G-25.307(R99-3.11.0)	3.11.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R99-3.11.0)

Release 4

ARIB	ARIB STD-T63-25.307	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25307-4d0.pdf
ATIS	ATIS.3GPP.25.307V4130-2009	4.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.307	4.13.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 307	4.13.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v4d0
TTA	TTAT.3G-25.307(R4-4.13.0)	4.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R4-4.13.0)

Release 5

ARIB	ARIB STD-T63-25.307	5.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25307-5c0.pdf
ATIS	ATIS.3GPP.25.307V5120-2009	5.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.307	5.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 307	5.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v5c0
TTA	TTAT.3G-25.307(R5-5.12.0)	5.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R5-5.12.0)

Release 6

ARIB	ARIB STD-T63-25.307	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25307-690.pdf
ATIS	ATIS.3GPP.25.307V690-2009	6.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.307	6.9.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 307	6.9.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v690
TTA	TTAT.3G-25.307(R6-6.9.0)	6.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-25.307	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25307-750.pdf
ATIS	ATIS.3GPP.25.307V750-2009	7.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.307	7.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 307	7.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v750
TTA	TTAT.3G-25.307(R7-7.5.0)	7.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-25.307	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25307-830.pdf
ATIS	ATIS.3GPP.25.307V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.307	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 307	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v830
TTA	TTAT.3G-25.307(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R8-8.3.0)

5.1.2.2.8 TS 25.308**UTRA High Speed Downlink Packet Access – Overall Description (Stage 2)**

This document is a technical specification of the overall support of High Speed Downlink Packet Access in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.308	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25308-570.pdf
ATIS	ATIS.3GPP.25.308V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.308	5.7.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 308	5.7.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v570
TTA	TTAT.3G-25.308(R5-5.7.0)	5.7.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R5-5.7.0)

Release 6

ARIB	ARIB STD-T63-25.308	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25308-640.pdf
ATIS	ATIS.3GPP.25.308V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.308	6.4.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 308	6.4.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v640
TTA	TTAT.3G-25.308(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R6-6.4.0)

Release 7

ARIB	ARIB STD-T63-25.308	7.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25308-790.pdf
ATIS	ATIS.3GPP.25.308V790-2009	7.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.308	7.9.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 308	7.9.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v790
TTA	TTAT.3G-25.308(R7-7.9.0)	7.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R7-7.9.0)

Release 8

ARIB	ARIB STD-T63-25.308	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25308-850.pdf
ATIS	ATIS.3GPP.25.308V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.308	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 308	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v850
TTA	TTAT.3G-25.308(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R8-8.5.0)

5.1.2.2.9 TS 25.319**Enhanced Uplink – Overall Description (Stage 2)**

This document is a technical specification of the overall support of FDD and TDD Enhanced Uplink in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.309V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
Release 7					
ARIB	ARIB STD-T63-25.319	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25319-760.pdf
ATIS	ATIS.3GPP.25.319V760-2008	7.6.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.319	7.6.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 319	7.6.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225319v760
TTA	TTAT.3G-25.319(R7-7.6.0)	7.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.319(R7-7.6.0)
Release 8					
ARIB	ARIB STD-T63-25.319	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25319-850.pdf
ATIS	ATIS.3GPP.25.319V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.319	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 319	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225319v850
TTA	TTAT.3G-25.319(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.319(R8-8.5.0)

5.1.2.2.10 TS 25.321

Medium access control (MAC) protocol specification

This specification describes the MAC protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.321	3.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25321-3h0.pdf
ATIS	ATIS.3GPP.25.321V3170-2005	3.17.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.321	3.17.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 321	3.17.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v3h0
TTA	TTAT.3G-25.321(R99-3.17.0)	3.17.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R99-3.17.0)
Release 4					
ARIB	ARIB STD-T63-25.321	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25321-4a0.pdf
ATIS	ATIS.3GPP.25.321V4100-2005	4.10.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.321	4.10.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 321	4.10.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v4a0
TTA	TTAT.3G-25.321(R4-4.10.0)	4.10.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R4-4.10.0)
Release 5					
ARIB	ARIB STD-T63-25.321	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25321-5e0.pdf
ATIS	ATIS.3GPP.25.321V5140-2009	5.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.321	5.14.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 321	5.14.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v5e0
TTA	TTAT.3G-25.321(R5-5.14.0)	5.14.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R5-5.14.0)
Release 6					
ARIB	ARIB STD-T63-25.321	6.18.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25321-6i0.pdf
ARIB	ARIB STD-T63-25.321	6.18.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25321-6i0.pdf
ATIS	ATIS.3GPP.25.321V6180-2009	6.18.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.321	6.18.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 321	6.18.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v6i0
TTA	TTAT.3G-25.321(R6-6.18.0)	6.18.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R6-6.18.0)
Release 7					
ARIB	ARIB STD-T63-25.321	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25321-7c0.pdf
ATIS	ATIS.3GPP.25.321V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.321	7.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 321	7.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v7c0
TTA	TTAT.3G-25.321(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R7-7.12.0)
Release 8					
ARIB	ARIB STD-T63-25.321	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25321-850.pdf
ATIS	ATIS.3GPP.25.321V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.321	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 321	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v850
TTA	TTAT.3G-25.321(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R8-8.5.0)

5.1.2.2.11 TS 25.322**Radio link control (RLC) protocol specification**

This specification describes the RLC protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.25.322V3180-2005	3.18.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.322	3.18.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 322	3.18.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v3i0
TTA	TTAT.3G-25.322(R99-3.18.0)	3.18.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R99-3.18.0)
TTC	TS-3GA-25.322(R99)v3.18.0	3.18.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts25322r99v3i0.pdf
Release 4					
ATIS	ATIS.3GPP.25.322V4120-2005	4.12.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.322	4.12.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 322	4.12.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v4c0
TTA	TTAT.3G-25.322(R4-4.12.0)	4.12.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R4-4.12.0)
TTC	TS-3GA-25.322(Rel4)v4.12.0	4.12.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts25322rel4v4c0.pdf
Release 5					
ATIS	ATIS.3GPP.25.322V5130-2006	5.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.322	5.13.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 322	5.13.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v5d0
TTA	TTAT.3G-25.322(R5-5.13.0)	5.13.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R5-5.13.0)
TTC	TS-3GA-25.322(Rel5)v5.13.0	5.13.0	Published	Feb 06	http://www.ttc.or.jp/imt/ts/ts25322rel5v5d0.pdf
Release 6					
ATIS	ATIS.3GPP.25.322V6120-2008	6.12.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.322	6.12.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 322	6.12.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v6c0
TTA	TTAT.3G-25.322(R6-6.12.0)	6.12.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R6-6.12.0)
TTC	TS-3GA-25.322(Rel6)v6.12.0	6.12.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25322rel6v6c0.pdf
Release 7					
ATIS	ATIS.3GPP.25.322V790-2009	7.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.322	7.9.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 322	7.9.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v790
TTA	TTAT.3G-25.322(R7-7.9.0)	7.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R7-7.9.0)
TTC	TS-3GA-25.322(Rel7)v7.9.0	7.9.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25322rel7v790.pdf
Release 8					
ATIS	ATIS.3GPP.25.322V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.322	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 322	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v840
TTA	TTAT.3G-25.322(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R8-8.4.0)
TTC	TS-3GA-25.322(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25322rel8v840.pdf

5.1.2.2.12 TS 25.323

Packet Data Convergence Protocol (PDCP) protocol

This document provides the description of the Packet Data Convergence Protocol (PDCP). PDCP provides its services to the NAS at the UE or the relay at the Radio Network Controller (RNC). PDCP uses the services provided by the Radio Link Control (RLC) sublayer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.323V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.323	3.10.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 323	3.10.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v3a0
TTA	TTAT.3G-25.323(R99-3.10.0)	3.10.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R99-3.10.0)
TTC	TS-3GA-25.323(R99)v3.10.0	3.10.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25323r99v3a0.pdf
Release 4					
ATIS	T1.3GPP.25.323V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.323	4.6.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 323	4.6.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v460
TTA	TTAT.3G-25.323(R4-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R4-4.6.0)
TTC	TS-3GA-25.323(Rel4)v4.6.0	4.6.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25323rel4v460.pdf
Release 5					
ATIS	ATIS.3GPP.25.323V5100-2008	5.10.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.323	5.10.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 323	5.10.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v5a0
TTA	TTAT.3G-25.323(R5-5.10.0)	5.10.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R5-5.10.0)
TTC	TS-3GA-25.323(Rel5)v5.10.0	5.10.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25323rel5v5a0.pdf
Release 6					
ATIS	ATIS.3GPP.25.323V6110-2008	6.11.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.323	6.11.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 323	6.11.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v6b0
TTA	TTAT.3G-25.323(R6-6.11.0)	6.11.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R6-6.11.0)
TTC	TS-3GA-25.323(Rel6)v6.11.0	6.11.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25323rel6v6b0.pdf
Release 7					
ATIS	ATIS.3GPP.25.323V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.323	7.7.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 323	7.7.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v770
TTA	TTAT.3G-25.323(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R7-7.7.0)
TTC	TS-3GA-25.323(Rel7)v7.7.0	7.7.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25323rel7v770.pdf
Release 8					
ATIS	ATIS.3GPP.25.323V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.323	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 323	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v840
TTA	TTAT.3G-25.323(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R8-8.4.0)
TTC	TS-3GA-25.323(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25323rel8v840.pdf

5.1.2.2.13 TS 25.324

Broadcast/Multicast Control (BMC) Services

This document provides the description of the Broadcast/Multicast Control Protocol (BMC). This protocol adapts broadcast and multicast services on the radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.25.324V390-2005	3.9.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.324	3.9.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 324	3.9.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v390
TTA	TTAT.3G-25.324(R99-3.9.0)	3.9.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R99-3.9.0)
TTC	TS-3GA-25.324(R99)v3.9.0	3.9.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25324r99v390.pdf
Release 4					
ATIS	ATIS.3GPP.25.324V450-2005	4.5.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.324	4.5.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 324	4.5.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v450
TTA	TTAT.3G-25.324(R4-4.5.0)	4.5.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R4-4.5.0)
TTC	TS-3GA-25.324(Rel4)v4.5.0	4.5.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25324rel4v450.pdf
Release 5					
ATIS	ATIS.3GPP.25.324V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.324	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 324	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v560
TTA	TTAT.3G-25.324(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R5-5.6.0)
TTC	TS-3GA-25.324(Rel5)v5.6.0	5.6.0	Published	Nov 05	http://www.ttc.or.jp/imt/ts/ts25324rel5v560.pdf
Release 6					
ATIS	ATIS.3GPP.25.324V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.324	6.6.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 324	6.6.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v660
TTA	TTAT.3G-25.324(R6-6.6.0)	6.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R6-6.6.0)
TTC	TS-3GA-25.324(Rel6)v6.6.0	6.6.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25324rel6v660.pdf
Release 7					
ATIS	ATIS.3GPP.25.324V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.324	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 324	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v710
TTA	TTAT.3G-25.324(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R7-7.1.0)
TTC	TS-3GA-25.324(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25324rel7v710.pdf
Release 8					
ATIS	ATIS.3GPP.25.324V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.324	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 324	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v800
TTA	TTAT.3G-25.324(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R8-8.0.0)
TTC	TS-3GA-25.324(Rel8)v8.0.0	8.0.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25324rel8v800.pdf

5.1.2.2.14 TS 25.331

Radio resource control (RRC) protocol specification

This specification describes the RRC protocol for the radio system. The scope of this specification contains also the information to be transported in a transparent container between source RNC and target RNC in connection to SRNC relocation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.25.331V3210-2005	3.21.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.331	3.21.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 331	3.21.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v3l0
TTA	TTAT.3G-25.331(R99-3.21.0)	3.21.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R99-3.21.0)
TTC	TS-3GA-25.331(R99)v3.21.0	3.21.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25331r99v3l0.pdf
Release 4					
ATIS	ATIS.3GPP.25.331V4200-2009	4.20.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.331	4.20.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 331	4.20.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v4k0
TTA	TTAT.3G-25.331(R4-4.20.0)	4.20.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R4-4.20.0)
TTC	TS-3GA-25.331(Rel4)v4.20.0	4.20.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25331rel4v4k0.pdf
Release 5					
ATIS	ATIS.3GPP.25.331V5230-2009	5.23.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.331	5.23.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 331	5.23.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v5n0
TTA	TTAT.3G-25.331(R5-5.23.0)	5.23.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R5-5.23.0)
TTC	TS-3GA-25.331(Rel5)v5.23.0	5.23.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25331rel5v5n0.pdf
Release 6					
ATIS	ATIS.3GPP.25.331V6210-2009	6.21.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.331	6.21.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 331	6.21.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v6l0
TTA	TTAT.3G-25.331(R6-6.21.0)	6.21.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R6-6.21.0)
TTC	TS-3GA-25.331(Rel6)v6.21.0	6.21.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25331rel6v6l0.pdf
Release 7					
ATIS	ATIS.3GPP.25.331V7121-2009	7.12.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.331	7.12.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 331	7.12.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v7c1
TTA	TTAT.3G-25.331(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R7-7.12.0)
TTC	TS-3GA-25.331(Rel7)v7.12.1	7.12.1	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25331rel7v7c1.pdf
Release 8					
ATIS	ATIS.3GPP.25.331V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.331	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 331	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v860
TTA	TTAT.3G-25.331(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R8-8.6.0)
TTC	TS-3GA-25.331(Rel8)v8.6.0	8.6.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25331rel8v860.pdf

5.1.2.2.15 TS 25.346**Introduction of the Multimedia Broadcast Multicast Service (MBMS) in the Radio Access Network**

This document is a technical specification of the overall support of Multimedia Broadcast and Multicast Services in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.346V6130-2008	6.13.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.346	6.13.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 346	6.13.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225346v6d0
TTA	TTAT.3G-25.346(R6-6.13.0)	6.13.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.346(R6-6.13.0)
TTC	TS-3GA-25.346(Rel6)v6.13.0	6.13.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25346rel6v6d0.pdf
Release 7					
ATIS	ATIS.3GPP.25.346V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.346	7.7.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 346	7.7.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225346v770
TTA	TTAT.3G-25.346(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.346(R7-7.7.0)
TTC	TS-3GA-25.346(Rel7)v7.7.0	7.7.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25346rel7v770.pdf
Release 8					
ATIS	ATIS.3GPP.25.346V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.346	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 346	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225346v830
TTA	TTAT.3G-25.346(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.346(R8-8.3.0)
TTC	TS-3GA-25.346(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25346rel8v830.pdf

5.1.2.2.16 TS 25.367**Mobility Procedures for Home Node B; Overall description; Stage 2**

This document provides a high level description of the mobility procedures applicable to Home NodeB support

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-25.367	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25367-810.pdf
ATIS	ATIS.3GPP.25.367V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.367	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 367	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225367v810
TTA	TTAT.3G-25.367(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.367(R8-8.1.0)

5.1.2.3 25.400 series

5.1.2.3.1 TS 25.401

UTRAN overall description

This specification describes the overall architecture of the UTRAN, including internal interfaces and assumptions on the radio and Iu interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.401	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25401-3a0.pdf
ATIS	T1.3GPP.25.401V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.401	3.10.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 401	3.10.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v3a0
TTA	TTAT.3G-25.401(R99-3.10.0)	3.10.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-25.401	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25401-460.pdf
ATIS	T1.3GPP.25.401V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.401	4.6.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 401	4.6.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v460
TTA	TTAT.3G-25.401(R4-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R4-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.401	5.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25401-5a0.pdf
ATIS	ATIS.3GPP.25.401V5100-2006	5.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.401	5.10.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 401	5.10.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v5a0
TTA	TTAT.3G-25.401(R5-5.10.0)	5.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R5-5.10.0)
Release 6					
ARIB	ARIB STD-T63-25.401	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25401-690.pdf
ATIS	ATIS.3GPP.25.401V690-2007	6.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.401	6.9.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 401	6.9.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v690
TTA	TTAT.3G-25.401(R6-6.9.0)	6.9.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R6-6.9.0)
Release 7					
ARIB	ARIB STD-T63-25.401	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25401-760.pdf
ATIS	ATIS.3GPP.25.401V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.401	7.6.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 401	7.6.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v760
TTA	TTAT.3G-25.401(R7-7.6.0)	7.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R7-7.6.0)
Release 8					
ARIB	ARIB STD-T63-25.401	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25401-820.pdf
ATIS	ATIS.3GPP.25.401V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.401	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 401	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v820
TTA	TTAT.3G-25.401(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R8-8.2.0)

5.1.2.3.2 TS 25.402

Synchronization in UTRAN Stage 2

This document constitutes the Stage 2 specification of different synchronization mechanisms in UTRAN and on Uu.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.402	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25402-3a0.pdf
ATIS	T1.3GPP.25.402V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.402	3.10.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 402	3.10.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v3a0
TTA	TTAT.3G-25.402(R99-3.10.0)	3.10.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-25.402	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25402-460.pdf
ATIS	T1.3GPP.25.402V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.402	4.6.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 402	4.6.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v460
TTA	TTAT.3G-25.402(R4-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R4-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.402	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25402-540.pdf
ATIS	ATIS.3GPP.25.402V540-2006	5.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.402	5.4.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 402	5.4.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v540
TTA	TTAT.3G-25.402(R5-5.4.0)	5.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R5-5.4.0)
Release 6					
ARIB	ARIB STD-T63-25.402	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25402-660.pdf
ATIS	ATIS.3GPP.25.402V660-2009	6.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.402	6.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 402	6.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v660
TTA	TTAT.3G-25.402(R6-6.6.0)	6.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R6-6.6.0)
Release 7					
ARIB	ARIB STD-T63-25.402	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25402-760.pdf
ATIS	ATIS.3GPP.25.402V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.402	7.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 402	7.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v760
TTA	TTAT.3G-25.402(R7-7.6.0)	7.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R7-7.6.0)
Release 8					
ARIB	ARIB STD-T63-25.402	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25402-800.pdf
ATIS	ATIS.3GPP.25.402V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.402	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 402	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v800
TTA	TTAT.3G-25.402(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R8-8.0.0)

5.1.2.3.3 TS 25.410

UTRAN Iu interface: general aspects and principles

This specification describes an introduction to the 25.41x series of technical specifications that define the Iu interface for the interconnection of RNC component of the UTRAN to the CN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.410V380-2003	3.8.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.410	3.8.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 410	3.8.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v380
TTA	TTAT.3G-25.410(R99-3.8.0)	3.8.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R99-3.8.0)
TTC	TS-3GA-25.410(R99)v3.8.0	3.8.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25410r99v380.pdf
Release 4					
ATIS	T1.3GPP.25.410V450-2003	4.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.410	4.5.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 410	4.5.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v450
TTA	TTAT.3G-25.410(R4-4.5.0)	4.5.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R4-4.5.0)
TTC	TS-3GA-25.410(Rel4)v4.5.0	4.5.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25410rel4v450.pdf
Release 5					
ATIS	ATIS.3GPP.25.410V540-2005	5.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.410	5.4.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 410	5.4.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v540
TTA	TTAT.3G-25.410(R5-5.4.0)	5.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R5-5.4.0)
TTC	TS-3GA-25.410(Rel5)v5.4.0	5.4.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts25410rel5v540.pdf
Release 6					
ATIS	ATIS.3GPP.25.410V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.410	6.5.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 410	6.5.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v650
TTA	TTAT.3G-25.410(R6-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R6-6.5.0)
TTC	TS-3GA-25.410(Rel6)v6.5.0	6.5.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25410rel6v650.pdf
Release 7					
ATIS	ATIS.3GPP.25.410V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.410	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 410	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v700
TTA	TTAT.3G-25.410(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R7-7.0.0)
TTC	TS-3GA-25.410(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25410rel7v700.pdf
Release 8					
ATIS	ATIS.3GPP.25.410V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.410	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 410	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v810
TTA	TTAT.3G-25.410(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R8-8.1.0)
TTC	TS-3GA-25.410(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25410rel8v810.pdf

5.1.2.3.4 TS 25.411

UTRAN Iu interface Layer 1

This specification describes the standards allowed to implement Layer 1 on the Iu interface. The specification of transmission delay requirements and O&M requirements are not in the scope of this specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.411V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.411	3.5.0	Published	Aug 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 411	3.5.0	Published	Aug 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411UR4
TTA	TTAE.3G-25.411(R99-3.5.0)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.411(R99-3.5.0)
TTC	TS-3GA-25.411(R99)v3.5.0	3.5.0	Published	Aug 01	http://www.ttc.or.jp/imt/ts/ts25411r99v350.pdf
Release 4					
ATIS	T1.3GPP.25.411V410-2002	4.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.411	4.1.0	Published	Aug 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 411	4.1.0	Published	Aug 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411Uv4R1
TTA	TTAE.3G-25.411(R4-4.1.0)	4.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.411(R4-4.1.0)
TTC	TS-3GA-25.411(Rel4)v4.1.0	4.1.0	Published	Aug 01	http://www.ttc.or.jp/imt/ts/ts25411rel4v410.pdf
Release 5					
ATIS	ATIS.3GPP.25.411V510-2005	5.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.411	5.1.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 411	5.1.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v510
TTA	TTAT.3G-25.411(R5-5.1.0)	5.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R5-5.1.0)
TTC	TS-3GA-25.411(Rel5)v5.1.0	5.1.0	Published	Nov 04	http://www.ttc.or.jp/imt/ts/ts25411rel5v510.pdf
Release 6					
ATIS	ATIS.3GPP.25.411V610-2005	6.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.411	6.1.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 411	6.1.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v610
TTA	TTAT.3G-25.411(R6-6.1.0)	6.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R6-6.1.0)
TTC	TS-3GA-25.411(Rel6)v6.1.0	6.1.0	Published	Nov 04	http://www.ttc.or.jp/imt/ts/ts25411rel6v610.pdf
Release 7					
ATIS	ATIS.3GPP.25.411V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.411	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 411	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v710
TTA	TTAT.3G-25.411(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R7-7.1.0)
TTC	TS-3GA-25.411(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25411rel7v710.pdf
Release 8					
ATIS	ATIS.3GPP.25.411V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.411	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 411	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v800
TTA	TTAT.3G-25.411(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R8-8.0.0)
TTC	TS-3GA-25.411(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25411rel8v800.pdf

5.1.2.3.5 TS 25.412

UTRAN Iu interface signalling transport

This specification describes the standards for Signalling Transport to be used across Iu Interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.412V360-2002	3.6.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.412	3.6.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 412	3.6.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412UR4
TTA	TTAE.3G-25.412(R99-3.6.0)	3.6.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.412(R99-3.6.0)
TTC	TS-3GA-25.412(R99)v3.6.0	3.6.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts25412r99v360.pdf
Release 4					
ATIS	T1.3GPP.25.412V410-2003	4.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.412	4.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 412	4.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v410
TTA	TTAT.3G-25.412(R4-4.1.0)	4.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R4-4.1.0)
TTC	TS-3GA-25.412(Rel4)v4.1.0	4.1.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25412rel4v410.pdf
Release 5					
ATIS	ATIS.3GPP.25.412V520-2005	5.2.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.412	5.2.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 412	5.2.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v520
TTA	TTAT.3G-25.412(R5-5.2.0)	5.2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R5-5.2.0)
TTC	TS-3GA-25.412(Rel5)v5.2.0	5.2.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25412rel5v520.pdf
Release 6					
ATIS	ATIS.3GPP.25.412V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.412	6.4.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 412	6.4.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v640
TTA	TTAT.3G-25.412(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R6-6.4.0)
TTC	TS-3GA-25.412(Rel6)v6.4.0	6.4.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25412rel6v640.pdf
Release 7					
ATIS	ATIS.3GPP.25.412V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.412	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 412	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v710
TTA	TTAT.3G-25.412(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R7-7.1.0)
TTC	TS-3GA-25.412(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25412rel7v710.pdf
Release 8					
ATIS	ATIS.3GPP.25.412V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.412	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 412	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v800
TTA	TTAT.3G-25.412(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R8-8.0.0)
TTC	TS-3GA-25.412(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25412rel8v800.pdf

5.1.2.3.6 TS 25.413

UTRAN Iu interface RANAP signalling

This specification describes the signalling between the CN and the UTRAN over the Iu interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	TT1.3GPP.25.413V3140-2004	3.14.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.413	3.14.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 413	3.14.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v3e0
TTA	TTAT.3G-25.413(R99-3.14.0)	3.14.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R99-3.14.0)
TTC	TS-3GA-25.413(R99)v3.14.0	3.14.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts25413r99v3e0.pdf
Release 4					
ATIS	ATIS.3GPP.25.413V4120-2005	4.12.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.413	4.12.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 413	4.12.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v4c0
TTA	TTAT.3G-25.413(R4-4.12.0)	4.12.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R4-4.12.0)
TTC	TS-3GA-25.413(Rel4)v4.12.0	4.12.0	Published	May 04	http://www.ttc.or.jp/imt/ts/ts25413rel4v4c0.pdf
Release 5					
ATIS	ATIS.3GPP.25.413V5120-2006	5.12.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.413	5.12.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 413	5.12.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v5c0
TTA	TTAT.3G-25.413(R5-5.12.0)	5.12.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R5-5.12.0)
TTC	TS-3GA-25.413(Rel5)v5.12.0	5.12.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts25413rel5v5c0.pdf
Release 6					
ATIS	ATIS.3GPP.25.413V6160-2008	6.16.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.413	6.16.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 413	6.16.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v6g0
TTA	TTAT.3G-25.413(R6-6.16.0)	6.16.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R6-6.16.0)
TTC	TS-3GA-25.413(Rel6)v6.16.0	6.16.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25413rel6v6g0.pdf
Release 7					
ATIS	ATIS.3GPP.25.413V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.413	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 413	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v7a0
TTA	TTAT.3G-25.413(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R7-7.10.0)
TTC	TS-3GA-25.413(Rel7)v7.10.0	7.10.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25413rel7v7a0.pdf
Release 8					
ATIS	ATIS.3GPP.25.413V821-2009	8.2.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.413	8.2.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 413	8.2.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v821
TTA	TTAT.3G-25.413(R8-8.2.1)	8.2.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R8-8.2.1)
TTC	TS-3GA-25.413(Rel8)v8.2.1	8.2.1	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25413rel8v821.pdf

5.1.2.3.7 TS 25.414

UTRAN Iu interface data transport and transport signalling

This specification describes the standards for user data transport protocols and related signalling protocols to establish user plane transport bearers over the Iu interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.414V3130-2004	3.13.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.414	3.13.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 414	3.13.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v3d0
TTA	TTAT.3G-25.414(R99-3.13.0)	3.13.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R99-3.13.0)
TTC	TS-3GA-25.414(R99)v3.13.0	3.13.0	Published	May 03	http://www.ttc.or.jp/imt/ts/ts25414r99v3d0.pdf
Release 4					
ATIS	T1.3GPP.25.414V470-2004	4.7.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.414	4.7.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 414	4.7.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v470
TTA	TTAT.3G-25.414(R4-4.7.0)	4.7.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R4-4.7.0)
TTC	TS-3GA-25.414(Rel4)v4.7.0	4.7.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts25414rel4v470.pdf
Release 5					
ATIS	ATIS.3GPP.25.414V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.414	5.7.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 414	5.7.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v570
TTA	TTAT.3G-25.414(R5-5.7.0)	5.7.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R5-5.7.0)
TTC	TS-3GA-25.414(Rel5)v5.7.0	5.7.0	Published	Nov 04	http://www.ttc.or.jp/imt/ts/ts25414rel5v570.pdf
Release 6					
ATIS	ATIS.3GPP.25.414V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.414	6.4.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 414	6.4.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v640
TTA	TTAT.3G-25.414(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R6-6.4.0)
TTC	TS-3GA-25.414(Rel6)v6.4.0	6.4.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25414rel6v640.pdf
Release 7					
ATIS	ATIS.3GPP.25.414V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.414	7.1.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 414	7.1.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v710
TTA	TTAT.3G-25.414(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R7-7.1.0)
TTC	TS-3GA-25.414(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25414rel7v710.pdf
Release 8					
ATIS	ATIS.3GPP.25.414V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.414	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 414	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v800
TTA	TTAT.3G-25.414(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R8-8.0.0)
TTC	TS-3GA-25.414(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25414rel8v800.pdf

5.1.2.3.8 TS 25.415**UTRAN Iu interface user plane protocols**

This specification describes the protocols being used to transport and control over the Iu interface, the Iu user data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	TT1.3GPP.25.415V3120-2003	3.12.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.415	3.12.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 415	3.12.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v3c0
TTA	TTAT.3G-25.415(R99-3.12.0)	3.12.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R99-3.12.0)
TTC	TS-3GA-25.415(R99)v3.12.0	3.12.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/25415r99v3c0.pdf
Release 4					
ATIS	TT1.3GPP.25.415V470-2003	4.7.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.415	4.7.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 415	4.7.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v470
TTA	TTAT.3G-25.415(R4-4.7.0)	4.7.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R4-4.7.0)
TTC	TS-3GA-25.415(Rel4)v4.7.0	4.7.0	Published	Feb 03	http://www.ttc.or.jp/imt/ts/25415rel4v470.pdf
Release 5					
ATIS	ATIS.3GPP.25.415V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.415	5.5.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 415	5.5.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v550
TTA	TTAT.3G-25.415(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R5-5.5.0)
TTC	TS-3GA-25.415(Rel5)v5.5.0	5.5.0	Published	May 05	http://www.ttc.or.jp/imt/ts/25415rel5v550.pdf
Release 6					
ATIS	ATIS.3GPP.25.415V630-2007	6.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.415	6.3.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 415	6.3.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v630
TTA	TTAT.3G-25.415(R6-6.3.0)	6.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R6-6.3.0)
TTC	TS-3GA-25.415(Rel6)v6.3.0	6.3.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/25415rel6v630.pdf
Release 7					
ATIS	ATIS.3GPP.25.415V730-2007	7.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.415	7.3.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 415	7.3.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v730
TTA	TTAT.3G-25.415(R7-7.3.0)	7.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R7-7.3.0)
TTC	TS-3GA-25.415(Rel7)v7.3.0	7.3.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/25415rel7v730.pdf
Release 8					
ATIS	ATIS.3GPP.25.415V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.415	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 415	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v800
TTA	TTAT.3G-25.415(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R8-8.0.0)
TTC	TS-3GA-25.415(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/25415rel8v800.pdf

5.1.2.3.9 TS 25.419

UTRAN Iu-bc interface: Cell broadcast protocols between CBC and RNC

This document specifies the Service Area Broadcast Protocol (SABP) between the Cell Broadcast Centre (CBC) and the Radio Network Controller (RNC).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.419V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.419	3.11.0	Published	Jun 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 419	3.11.0	Published	Jun 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v3b0
TTA	TTAT.3G-25.419(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R99-3.11.0)
TTC	TS-3GA-25.419(R99)v3.11.0	3.11.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/25419r99v3b0.pdf
Release 4					
ATIS	T1.3GPP.25.419V4100-2004	4.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.419	4.10.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 419	4.10.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v4a0
TTA	TTAT.3G-25.419(R4-4.10.0)	4.10.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R4-4.10.0)
TTC	TS-3GA-25.419(Rel4)v4.10.0	4.10.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/25419rel4v4a0.pdf
Release 5					
ATIS	ATIS.3GPP.25.419V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.419	5.7.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 419	5.7.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v570
TTA	TTAT.3G-25.419(R5-5.7.0)	5.7.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R5-5.7.0)
TTC	TS-3GA-25.419(Rel5)v5.7.0	5.7.0	Published	May 04	http://www.ttc.or.jp/imt/ts/25419rel5v570.pdf
Release 6					
ATIS	ATIS.3GPP.25.419V620-2005	6.2.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.419	6.2.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 419	6.2.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v620
TTA	TTAT.3G-25.419(R6-6.2.0)	6.2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R6-6.2.0)
TTC	TS-3GA-25.419(Rel6)v6.2.0	6.2.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/25419rel6v620.pdf
Release 7					
ATIS	ATIS.3GPP.25.419V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.419	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 419	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v700
TTA	TTAT.3G-25.419(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R7-7.0.0)
TTC	TS-3GA-25.419(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/25419rel7v700.pdf
Release 8					
ATIS	ATIS.3GPP.25.419V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.419	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 419	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v800
TTA	TTAT.3G-25.419(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R8-8.0.0)
TTC	TS-3GA-25.419(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/25419rel8v800.pdf

5.1.2.3.10 TS 25.420**UTRAN Iur interface: general aspects and principles**

This specification describes an introduction to the TSG RAN TS 25.42x series of technical specifications that define the Iur interface. It is a logical interface for the interconnection of two RNC components of the UTRAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.420	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25420-350.pdf
ATIS	T1.3GPP.25.420V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.420	3.5.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 420	3.5.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420UR5
TTA	TTAE.3G-25.420(R99-3.5.0)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.420(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-25.420	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25420-420.pdf
ATIS	T1.3GPP.25.420V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.420	4.2.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 420	4.2.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420Uv4R2
TTA	TTAE.3G-25.420(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.420(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-25.420	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25420-530.pdf
ATIS	ATIS.3GPP.25.420V530-2006	5.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.420	5.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 420	5.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v530
TTA	TTAT.3G-25.420(R5-5.3.0)	5.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R5-5.3.0)
Release 6					
ARIB	ARIB STD-T63-25.420	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25420-640.pdf
ATIS	ATIS.3GPP.25.420V640-2006	6.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.420	6.4.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 420	6.4.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v640
TTA	TTAT.3G-25.420(R6-6.4.0)	6.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R6-6.4.0)
Release 7					
ARIB	ARIB STD-T63-25.420	7.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25420-730.pdf
ATIS	ATIS.3GPP.25.420V730-2007	7.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.420	7.3.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 420	7.3.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v730
TTA	TTAT.3G-25.420(R7-7.3.0)	7.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R7-7.3.0)
Release 8					
ARIB	ARIB STD-T63-25.420	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25420-810.pdf
ATIS	ATIS.3GPP.25.420V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.420	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 420	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v810
TTA	TTAT.3G-25.420(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R8-8.1.0)

5.1.2.3.11 TS 25.421

UTRAN Iur interface Layer 1

This specification describes the standards allowed to implement Layer 1 on the Iur interface. The specification of transmission delay requirements and O&M requirements are not in the scope of this specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.421	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25421-310.pdf
ATIS	T1.3GPP.25.421V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.421	3.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 421	3.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421UR1
TTA	TTAE.3G-25.421(R99-3.1.0)	3.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.421(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-25.421	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25421-400.pdf
ATIS	T1.3GPP.25.421V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.421	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 421	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421Uv4
TTA	TTAE.3G-25.421(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.421(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.421	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25421-500.pdf
ATIS	T1.3GPP.25.421V500-2002	5.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.421	5.0.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 421	5.0.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421Uv5
TTA	TTAE.3G-25.421(R5-5.0.0)	5.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.421(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-25.421	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25421-600.pdf
ATIS	T1.3GPP.25.421V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.421	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 421	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421v600
TTA	TTAT.3G-25.421(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.421(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.421	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25421-700.pdf
ATIS	ATIS.3GPP.25.421V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.421	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 421	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421v700
TTA	TTAT.3G-25.421(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.421(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-25.421	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25421-800.pdf
ATIS	ATIS.3GPP.25.421V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.421	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 421	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421v800
TTA	TTAT.3G-25.421(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.421(R8-8.0.0)

5.1.2.3.12 TS 25.422

UTRAN Iur interface signalling transport

This specification describes the standards for Signalling Transport to be used across Iur Interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.422	3.6.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25422-361.pdf
ATIS	T1.3GPP.25.422V361-2002	3.6.1	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.422	3.6.1	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 422	3.6.1	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422UR6
TTA	TTAT.3G-25.422(R99-3.6.1)	3.6.1	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R99-3.6.1)
Release 4					
ARIB	ARIB STD-T63-25.422	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25422-420.pdf
ATIS	T1.3GPP.25.422V420-2003	4.2.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.422	4.2.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 422	4.2.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v420
TTA	TTAT.3G-25.422(R4-4.2.0)	4.2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-25.422	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25422-510.pdf
ATIS	T1.3GPP.25.422V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.422	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 422	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v510
TTA	TTAT.3G-25.422(R5-5.1.0))	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R5-5.1.0))
Release 6					
ARIB	ARIB STD-T63-25.422	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25422-620.pdf
ATIS	ATIS.3GPP.25.422V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.422	6.2.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 422	6.2.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v620
TTA	TTAT.3G-25.422(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R6-6.2.0)
Release 7					
ARIB	ARIB STD-T63-25.422	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25422-710.pdf
ATIS	ATIS.3GPP.25.422V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.422	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 422	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v710
TTA	TTAT.3G-25.422(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.422	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25422-800.pdf
ATIS	ATIS.3GPP.25.422V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.422	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 422	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v800
TTA	TTAT.3G-25.422(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R8-8.0.0)

5.1.2.3.13 TS 25.423

UTRAN Iur interface RNSAP signalling

This specification describes the radio network layer signalling procedures between RNCs in UTRAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.423	3.14.2	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25423-3e2.pdf
ATIS	ATIS.3GPP.25.423V3142-2005	3.14.2	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.423	3.14.2	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 423	3.14.2	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v3e2
TTA	TTAT.3G-25.423(R99-3.14.2)	3.14.2	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R99-3.14.2)
Release 4					
ARIB	ARIB STD-T63-25.423	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25423-4d0.pdf
ATIS	ATIS.3GPP.25.423V4130-2006	4.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.423	4.13.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 423	4.13.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v4d0
TTA	TTAT.3G-25.423(R4-4.13.0)	4.13.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R4-4.13.0)
Release 5					
ARIB	ARIB STD-T63-25.423	5.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25423-5h0.pdf
ATIS	ATIS.3GPP.25.423V5170-2007	5.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.423	5.17.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 423	5.17.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v5h0
TTA	TTAT.3G-25.423(R5-5.17.0)	5.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R5-5.17.0)
Release 6					
ARIB	ARIB STD-T63-25.423	6.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25423-6h0.pdf
ATIS	ATIS.3GPP.25.423V6170-2008	6.17.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.423	6.17.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 423	6.17.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v6h0
TTA	TTAT.3G-25.423(R6-6.17.0)	6.17.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R6-6.17.0)
Release 7					
ARIB	ARIB STD-T63-25.423	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25423-7c0.pdf
ATIS	ATIS.3GPP.25.423V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.423	7.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 423	7.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v7c0
TTA	TTAT.3G-25.423(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R7-7.12.0)
Release 8					
ARIB	ARIB STD-T63-25.423	8.4.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25423-841.pdf
ATIS	ATIS.3GPP.25.423V841-2009	8.4.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.423	8.4.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 423	8.4.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v841
TTA	TTAT.3G-25.423(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R8-8.4.0)

5.1.2.3.14 TS 25.424**UTRAN Iur interface data transport and transport signalling for common transport channel data streams**

This specification describes the UTRAN RNS-RNS (Iur) interface data transport and transport signalling for common transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.424	3.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25424-390.pdf
ATIS	T1.3GPP.25.424V390-2003	3.9.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.424	3.9.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 424	3.9.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v390
TTA	TTAT.3G-25.424(R99-3.9.0)	3.9.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R99-3.9.0)
Release 4					
ARIB	ARIB STD-T63-25.424	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25424-430.pdf
ATIS	T1.3GPP.25.424V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.424	4.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 424	4.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v430
TTA	TTAT.3G-25.424(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-25.424	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25424-560.pdf
ATIS	ATIS.3GPP.25.424V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.424	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 424	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v560
TTA	TTAT.3G-25.424(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R5-5.6.0)
Release 6					
ARIB	ARIB STD-T63-25.424	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25424-630.pdf
ATIS	ATIS.3GPP.25.424V630-2006	6.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.424	6.3.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 424	6.3.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v630
TTA	TTAT.3G-25.424(R6-6.3.0)	6.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R6-6.3.0)
Release 7					
ARIB	ARIB STD-T63-25.424	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25424-710.pdf
ATIS	ATIS.3GPP.25.424V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.424	7.1.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 424	7.1.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v710
TTA	TTAT.3G-25.424(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.424	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25424-800.pdf
ATIS	ATIS.3GPP.25.424V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.424	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 424	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v800
TTA	TTAT.3G-25.424(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R8-8.0.0)

5.1.2.3.15 TS 25.425

UTRAN Iur interface user plane protocols for common transport channel data streams

This specification describes the UTRAN RNS-RNS (Iur) interface user plane protocols for common transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.425	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25425-380.pdf
ATIS	T1.3GPP.25.425V380-2004	3.8.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.425	3.8.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 425	3.8.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v380
TTA	TTAT.3G-25.425(R99-3.8.0)	3.8.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R99-3.8.0)
Release 4					
ARIB	ARIB STD-T63-25.425	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25425-440.pdf
ATIS	T1.3GPP.25.425V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.425	4.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 425	4.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v440
TTA	TTAT.3G-25.425(R4-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.425	5.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25425-580.pdf
ATIS	ATIS.3GPP.25.425V580-2006	5.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.425	5.8.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 425	5.8.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v580
TTA	TTAT.3G-25.425(R5-5.8.0)	5.8.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R5-5.8.0)
Release 6					
ARIB	ARIB STD-T63-25.425	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25425-660.pdf
ATIS	ATIS.3GPP.25.425V660-2009	6.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.425	6.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 425	6.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v660
TTA	TTAT.3G-25.425(R6-6.6.0)	6.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R6-6.6.0)
Release 7					
ARIB	ARIB STD-T63-25.425	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25425-7a0.pdf
ATIS	ATIS.3GPP.25.425V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.425	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 425	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v7a0
TTA	TTAT.3G-25.425(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R7-7.10.0)
Release 8					
ARIB	ARIB STD-T63-25.425	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25425-820.pdf
ATIS	ATIS.3GPP.25.425V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.425	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 425	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v820
TTA	TTAT.3G-25.425(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R8-8.2.0)

5.1.2.3.16 TS 25.426**UTRAN Iur and Iub interface data transport and transport signalling for DCH data streams**

This specification describes the transport bearers for the DCH data streams on UTRAN Iur and Iub interfaces. The corresponding transport network control plane is also specified. The physical layer for the transport bearers is outside the scope of this TS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.426	3.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25426-390.pdf
ATIS	T1.3GPP.25.426V390-2003	3.9.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.426	3.9.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 426	3.9.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v390
TTA	TTAT.3G-25.426(R99-3.9.0)	3.9.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R99-3.9.0)
Release 4					
ARIB	ARIB STD-T63-25.426	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25426-440.pdf
ATIS	T1.3GPP.25.426V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.426	4.4.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 426	4.4.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v440
TTA	TTAT.3G-25.426(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.426	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25426-560.pdf
ATIS	ATIS.3GPP.25.426V560-2005	5.6.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.426	5.6.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 426	5.6.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v560
TTA	TTAT.3G-25.426(R5-5.6.0)	5.6.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R5-5.6.0)
Release 6					
ARIB	ARIB STD-T63-25.426	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25426-650.pdf
ATIS	ATIS.3GPP.25.426V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.426	6.5.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 426	6.5.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v650
TTA	TTAT.3G-25.426(R6-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R6-6.5.0)
Release 7					
ARIB	ARIB STD-T63-25.426	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25426-710.pdf
ATIS	ATIS.3GPP.25.426V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.426	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 426	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v710
TTA	TTAT.3G-25.426(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.426	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25426-800.pdf
ATIS	ATIS.3GPP.25.426V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.426	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 426	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v800
TTA	TTAT.3G-25.426(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R8-8.0.0)

5.1.2.3.17 TS 25.427

UTRAN Iur and Iub interface user plane protocols for DCH data streams

This specification describes the UTRAN Iur and Iub interfaces user plane protocols for dedicated transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.427	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25427-3b0.pdf
ATIS	T1.3GPP.25.427V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.427	3.11.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 427	3.11.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v3b0
TTA	TTAT.3G-25.427(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.427	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25427-450.pdf
ATIS	T1.3GPP.25.427V450-2004	4.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.427	4.5.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 427	4.5.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v450
TTA	TTAT.3G-25.427(R4-4.5.0)	4.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R4-4.5.0)
Release 5					
ARIB	ARIB STD-T63-25.427	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25427-550.pdf
ATIS	ATIS.3GPP.25.427V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.427	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 427	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v550
TTA	TTAT.3G-25.427(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R5-5.5.0)
Release 6					
ARIB	ARIB STD-T63-25.427	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25427-680.pdf
ATIS	ATIS.3GPP.25.427V680-2007	6.8.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.427	6.8.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 427	6.8.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v680
TTA	TTAT.3G-25.427(R6-6.8.0)	6.8.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R6-6.8.0)
Release 7					
ARIB	ARIB STD-T63-25.427	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25427-750.pdf
ATIS	ATIS.3GPP.25.427V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.427	7.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 427	7.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v750
TTA	TTAT.3G-25.427(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R7-7.5.0)
Release 8					
ARIB	ARIB STD-T63-25.427	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25427-810.pdf
ATIS	ATIS.3GPP.25.427V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.427	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 427	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v810
TTA	TTAT.3G-25.427(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R8-8.1.0)

5.1.2.3.18 TS 25.430**UTRAN Iub interface: general aspects and principles**

This specification describes the TSG RAN TS 25.43x series of UMTS technical specifications that define the Iub interface. The Iub interface is a logical interface for the interconnection of Node B and RNC components of the UTRAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.430	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25430-380.pdf
ATIS	T1.3GPP.25.430V380-2003	3.8.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.430	3.8.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 430	3.8.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v380
TTA	TTAT.3G-25.430(R99-3.8.0)	3.8.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R99-3.8.0)
Release 4					
ARIB	ARIB STD-T63-25.430	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25430-440.pdf
ATIS	T1.3GPP.25.430V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.430	4.4.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 430	4.4.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v440
TTA	TTAT.3G-25.430(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.430	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25430-550.pdf
ATIS	ATIS.3GPP.25.430V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.430	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 430	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v550
TTA	TTAT.3G-25.430(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R5-5.5.0)
Release 6					
ARIB	ARIB STD-T63-25.430	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25430-650.pdf
ATIS	ATIS.3GPP.25.430V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.430	6.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 430	6.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v650
TTA	TTAT.3G-25.430(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R6-6.5.0)
Release 7					
ARIB	ARIB STD-T63-25.430	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25430-750.pdf
ATIS	ATIS.3GPP.25.430V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.430	7.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 430	7.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v750
TTA	TTAT.3G-25.430(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R7-7.5.0)
Release 8					
ARIB	ARIB STD-T63-25.430	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25430-800.pdf
ATIS	ATIS.3GPP.25.430V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.430	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 430	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v800
TTA	TTAT.3G-25.430(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R8-8.0.0)

5.1.2.3.19 TS 25.431

UTRAN Iub interface: Layer 1

This specification describes the standards allowed to implement Layer 1 on the Iub interface. The specification of transmission delay requirements and O&M requirements is not in the scope of this specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.431	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25431-310.pdf
ATIS	T1.3GPP.25.431V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.431	3.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 431	3.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431UR1
TTA	TTAE.3G-25.431(R99-3.1.0)	3.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.431(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-25.431	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25431-400.pdf
ATIS	T1.3GPP.25.431V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.431	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 431	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431Uv4
TTA	TTAE.3G-25.431(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.431(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.431	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25431-500.pdf
ATIS	T1.3GPP.25.431V500-2002	5.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.431	5.0.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 431	5.0.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431Uv5
TTA	TTAE.3G-25.431(R5-5.0.0)	5.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.431(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-25.431	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25431-600.pdf
ATIS	T1.3GPP.25.431V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.431	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 431	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431v600
TTA	TTAT.3G-25.431(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.431(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.431	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25431-700.pdf
ATIS	ATIS.3GPP.25.431V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.431	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 431	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431v700
TTA	TTAT.3G-25.431(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.431(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-25.431	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25431-800.pdf
ATIS	ATIS.3GPP.25.431V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.431	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 431	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431v800
TTA	TTAT.3G-25.431(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.431(R8-8.0.0)

5.1.2.3.20 TS 25.432**UTRAN Iub interface: signalling transport**

This specification describes the signalling transport related to the Node B application part (NBAP) signalling to be used across the Iub interface. The Iub interface is a logical interface for the interconnection of Node B and RNC components of the UTRAN. The RNC signalling between these nodes is based on NBAP.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.432	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25432-310.pdf
ATIS	T1.3GPP.25.432V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.432	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 432	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325432U
TTA	TTAE.3G-25.432(F)	3.1.0	Approved	Mar 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.432(F)
Release 4					
ARIB	ARIB STD-T63-25.432	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25432-400.pdf
ATIS	T1.3GPP.25.432V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.432	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 432	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432Uv4
TTA	TTAE.3G-25.432(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.432(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.432	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25432-510.pdf
ATIS	T1.3GPP.25.432V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.432	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 432	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v510
TTA	TTAT.3G-25.432(R5-5.1.0)	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R5-5.1.0)
Release 6					
ARIB	ARIB STD-T63-25.432	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25432-600.pdf
ATIS	T1.3GPP.25.432V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.432	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 432	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v600
TTA	TTAT.3G-25.432(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.432	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25432-710.pdf
ATIS	ATIS.3GPP.25.432V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.432	7.1.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 432	7.1.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v710
TTA	TTAT.3G-25.432(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.432	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25432-800.pdf
ATIS	ATIS.3GPP.25.432V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.432	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 432	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v800
TTA	TTAT.3G-25.432(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R8-8.0.0)

5.1.2.3.21 TS 25.433

UTRAN Iub interface: NBAP signalling

This specification describes the standards for NBAP specification to be used over Iub interface.

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Release 99					
ARIB	ARIB STD-T63-25.433	3.14.2	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25433-3e2.pdf
ATIS	ATIS.3GPP.25.433V3142-2005	3.14.2	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.433	3.14.2	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 433	3.14.2	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v3e2
TTA	TTAT.3G-25.433(R99-3.14.2)	3.14.2	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R99-3.14.2)
Release 4					
ARIB	ARIB STD-T63-25.433	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25433-4d0.pdf
ATIS	ATIS.3GPP.25.433V4130-2005	4.13.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.433	4.13.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 433	4.13.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v4d0
TTA	TTAT.3G-25.433(R4-4.13.0)	4.13.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R4-4.13.0)
Release 5					
ARIB	ARIB STD-T63-25.433	5.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25433-5g0.pdf
ATIS	ATIS.3GPP.25.433V5160-2007	5.16.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.433	5.16.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 433	5.16.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v5g0
TTA	TTAT.3G-25.433(R5-5.16.0)	5.16.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R5-5.16.0)
Release 6					
ARIB	ARIB STD-T63-25.433	6.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25433-6h0.pdf
ATIS	ATIS.3GPP.25.433V6170-2008	6.17.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.433	6.17.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 433	6.17.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v6h0
TTA	TTAT.3G-25.433(R6-6.17.0)	6.17.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R6-6.17.0)
Release 7					
ARIB	ARIB STD-T63-25.433	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25433-7c0.pdf
ATIS	ATIS.3GPP.25.433V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.433	7.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 433	7.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v7c0
TTA	TTAT.3G-25.433(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R7-7.12.0)
Release 8					
ARIB	ARIB STD-T63-25.433	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25433-840.pdf
ATIS	ATIS.3GPP.25.433V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.433	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 433	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v840
TTA	TTAT.3G-25.433(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R8-8.4.0)

5.1.2.3.22 TS 25.434

UTRAN Iub interface data transport and transport signalling for common transport channel data streams

This specification describes the UTRAN RNC-Node B (Iub) interface data transport and transport signalling for CCH data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.434	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25434-380.pdf
ATIS	T1.3GPP.25.434V380-2003	3.8.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.434	3.8.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 434	3.8.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v380
TTA	TTAT.3G-25.434(R99-3.8.0)	3.8.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R99-3.8.0)
Release 4					
ARIB	ARIB STD-T63-25.434	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25434-440.pdf
ATIS	T1.3GPP.25.434V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.434	4.4.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 434	4.4.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v440
TTA	TTAT.3G-25.434(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.434	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25434-550.pdf
ATIS	ATIS.3GPP.25.434V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.434	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 434	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v550
TTA	TTAT.3G-25.434(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R5-5.5.0)
Release 6					
ARIB	ARIB STD-T63-25.434	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25434-620.pdf
ATIS	ATIS.3GPP.25.434V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.434	6.2.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 434	6.2.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v620
TTA	TTAT.3G-25.434(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R6-6.2.0)
Release 7					
ARIB	ARIB STD-T63-25.434	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25434-720.pdf
ATIS	ATIS.3GPP.25.434V720-2008	7.2.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.434	7.2.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 434	7.2.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v720
TTA	TTAT.3G-25.434(R7-7.2.0)	7.2.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R7-7.2.0)
Release 8					
ARIB	ARIB STD-T63-25.434	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25434-800.pdf
ATIS	ATIS.3GPP.25.434V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.434	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 434	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v800
TTA	TTAT.3G-25.434(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R8-8.0.0)

5.1.2.3.23 TS 25.435

UTRAN Iub interface user plane protocols for common transport channel data streams

This specification describes the UTRAN RNC-Node B (Iub) interface user plane protocols for common transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.435	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25435-3b0.pdf
ATIS	T1.3GPP.25.435V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.435	3.11.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 435	3.11.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v3b0
TTA	TTAT.3G-25.435(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.435	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25435-460.pdf
ATIS	T1.3GPP.25.435V460-2004	4.6.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.435	4.6.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 435	4.6.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v460
TTA	TTAT.3G-25.435(R4-4.6.0)	4.6.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R4-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.435	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25435-590.pdf
ATIS	ATIS.3GPP.25.435V590-2007	5.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.435	5.9.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 435	5.9.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v590
TTA	TTAT.3G-25.435(R5-5.9.0)	5.9.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R5-5.9.0)
Release 6					
ARIB	ARIB STD-T63-25.435	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25435-650.pdf
ATIS	ATIS.3GPP.25.435V650-2009	6.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.435	6.5.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 435	6.5.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v650
TTA	TTAT.3G-25.435(R6-6.5.0)	6.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R6-6.5.0)
Release 7					
ARIB	ARIB STD-T63-25.435	7.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25435-7b0.pdf
ATIS	ATIS.3GPP.25.435V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.435	7.11.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 435	7.11.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v7b0
TTA	TTAT.3G-25.435(R7-7.11.0)	7.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R7-7.11.0)
Release 8					
ARIB	ARIB STD-T63-25.435	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25435-820.pdf
ATIS	ATIS.3GPP.25.435V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.435	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 435	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v820
TTA	TTAT.3G-25.435(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R8-8.2.0)

5.1.2.3.24 TS 25.442

UTRAN implementation specific O&M transport

This specification describes the transport of implementation specific O&M signalling between Node B and the management platform in case that the transport is routed via the RNC.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.442	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25442-310.pdf
ATIS	T1.3GPP.25.442V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.442	3.1.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 442	3.1.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442UR1
TTA	TTAE.3G-25.442(R99-3.1.0)	3.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.442(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-25.442	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25442-400.pdf
ATIS	T1.3GPP.25.442V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.442	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 442	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442Uv4
TTA	TTAE.3G-25.442(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.442(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.442	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25442-510.pdf
ATIS	T1.3GPP.25.442V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.442	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 442	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v510
TTA	TTAT.3G-25.442(R5-5.1.0)	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R5-5.1.0)
Release 6					
ARIB	ARIB STD-T63-25.442	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25442-600.pdf
ATIS	T1.3GPP.25.442V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.442	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 442	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v600
TTA	TTAT.3G-25.442(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.442	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25442-700.pdf
ATIS	ATIS.3GPP.25.442V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.442	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 442	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v700
TTA	TTAT.3G-25.442(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-25.442	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25442-800.pdf
ATIS	ATIS.3GPP.25.442V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.442	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 442	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v800
TTA	TTAT.3G-25.442(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R8-8.0.0)

5.1.2.3.25 TS 25.446**MBMS Synchronisation Protocol (SYNC)**

This specification describes the MBMS Synchronisation Protocol. For the release of this specification it is used on Iu towards UTRAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-25.446	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25446-800.pdf
ATIS	ATIS.3GPP.25.446V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.446	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 446	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325446v800
TTA	TTAE.3G-25.446(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.446(R8-8.0.0)

5.1.2.3.26 TS 25.450**UTRAN Iupc interface general aspects and principles**

The present document is an introduction to the TSG RAN TS 25.45z series of UMTS Technical Specifications that define the Iupc Interface. The Iupc interface is a logical interface for the interconnection of Standalone SMLC (SAS) and Radio Network Controller (RNC) components of the Universal Terrestrial Radio Access Network (UTRAN) for the UMTS system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.450	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25450-520.pdf
ATIS	ATIS.3GPP.25.450V520-2006	5.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.450	5.2.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 450	5.2.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v520
TTA	TTAE.3G-25.450(R5-5.2.0)	5.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.450(R5-5.2.0)
Release 6					
ARIB	ARIB STD-T63-25.450	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25450-620.pdf
ATIS	ATIS.3GPP.25.450V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.450	6.2.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 450	6.2.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v620
TTA	TTAT.3G-25.450(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.450(R6-6.2.0)
Release 7					
ARIB	ARIB STD-T63-25.450	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25450-720.pdf
ATIS	ATIS.3GPP.25.450V720-2007	7.2.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.450	7.2.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 450	7.2.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v720
TTA	TTAT.3G-25.450(R7-7.2.0)	7.2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.450(R7-7.2.0)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-25.450	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25450-800.pdf
ATIS	ATIS.3GPP.25.450V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ATIS	ATIS.3GPP.25.451V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.450	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 450	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v800
TTA	TTAT.3G-25.450(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.450(R8-8.0.0)

5.1.2.3.27 TS 25.451**UTRAN Iupc Interface Layer 1**

The present document specifies the standards allowed to implement Layer 1 on the Iupc interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.451	5.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25451-501.pdf
ATIS	T1.3GPP.25.451V501-2002	5.0.1	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.451	5.0.1	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 451	5.0.1	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325451Uv5
TTA	TTAT.3G-25.451(R5-5.0.1)	5.0.1	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R5-5.0.1)
Release 6					
ARIB	ARIB STD-T63-25.451	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25451-600.pdf
ATIS	T1.3GPP.25.451V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.451	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 451	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325451v600
TTA	TTAT.3G-25.451(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.451	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25451-700.pdf
ATIS	ATIS.3GPP.25.451V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.451	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 451	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325451v700
TTA	TTAT.3G-25.451(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-25.451	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25451-800.pdf
ATIS	ATIS.3GPP.25.451V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.451	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 451	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325451v800
TTA	TTAT.3G-25.451(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R8-8.0.0)

5.1.2.3.28 TS 25.452**UTRAN Iupc Interface: Signalling Transport**

The present document specifies the signalling transport related to PCAP signalling to be used across the Iupc interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.452	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25452-500.pdf
ATIS	T1.3GPP.25.452V500-2002	5.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.452	5.0.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 452	5.0.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325452Uv5
TTA	TTAE.3G-25.452(R5-5.0.0)	5.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.452(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-25.452	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25452-600.pdf
ATIS	T1.3GPP.25.452V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.452	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 452	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325452v600
TTA	TTAT.3G-25.452(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.452(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.452	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25452-710.pdf
ATIS	ATIS.3GPP.25.452V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.452	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 452	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325452v710
TTA	TTAT.3G-25.452(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.452(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.452	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25452-800.pdf
ATIS	ATIS.3GPP.25.452V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.452	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 452	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325452v800
TTA	TTAT.3G-25.452(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.452(R8-8.0.0)

5.1.2.3.29 TS 25.453**UTRAN Iupc interface PCAP signalling**

The present document specifies the Positioning Calculation Application Part (PCAP) between the Radio Network Controller (RNC) and the Stand-alone SMLC (SAS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.453	5.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25453-5c0.pdf
ATIS	ATIS.3GPP.25.453V5120-2007	5.12.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.453	5.12.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 453	5.12.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v5c0
TTA	TTAT.3G-25.453(R5-5.12.0)	5.12.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R5-5.12.0)

Release 6

ARIB	ARIB STD-T63-25.453	6.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25453-6b0.pdf
ATIS	ATIS.3GPP.25.453V6110-2007	6.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.453	6.11.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 453	6.11.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v6b0
TTA	TTAT.3G-25.453(R6-6.11.0)	6.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R6-6.11.0)

Release 7

ARIB	ARIB STD-T63-25.453	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25453-7c0.pdf
ATIS	ATIS.3GPP.25.453V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.453	7.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 453	7.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v7c0
TTA	TTAT.3G-25.453(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R7-7.12.0)

Release 8

ARIB	ARIB STD-T63-25.453	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25453-810.pdf
ATIS	ATIS.3GPP.25.453V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.453	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 453	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v810
TTA	TTAT.3G-25.453(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R8-8.1.0)

5.1.2.3.30 TS 25.460

UTRAN Iuant Interface: General Aspects and Principles

This document is an introduction to the TSG RAN TS 25.46x series of UMTS Technical Specifications that define the Iuant Interface. The logical Iuant interface is a Node B internal interface between the implementation specific O&M function and the Remote Electrical Tilting (RET) Antenna Control unit function of the Node B.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.460V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.460	6.2.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 460	6.2.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325460v620
TTA	TTAT.3G-25.460(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.460(R6-6.2.0)
Release 7					
ATIS	ATIS.3GPP.25.460V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.460	7.1.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 460	7.1.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325460v710
TTA	TTAT.3G-25.460(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.460(R7-7.1.0)
Release 8					
ATIS	ATIS.3GPP.25.460V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.460	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 460	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325460v810
TTA	TTAT.3G-25.460(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.460(R8-8.1.0)

5.1.2.3.31 TS 25.461**UTRAN Iuant Interface: Layer 1**

This document specifies the standards allowed to implement Layer 1 on the Iuant interface. The specification of transmission delay requirements and O&M requirements are not in the scope of the present document.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.461V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.461	6.5.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 461	6.5.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325461v650
TTA	TTAT.3G-25.461(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.461(R6-6.5.0)
Release 7					
ATIS	ATIS.3GPP.25.461V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.461	7.5.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 461	7.5.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325461v750
TTA	TTAT.3G-25.461(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.461(R7-7.5.0)
Release 8					
ATIS	ATIS.3GPP.25.461V810-2008	8.1.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.461	8.1.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 461	8.1.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325461v810
TTA	TTAT.3G-25.461(R8-8.1.0)	8.1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.461(R8-8.1.0)

5.1.2.3.32 TS 25.462**UTRAN Iuant Interface: Signalling Transport**

This document specifies the signalling transport related to RETAP signalling to be used across the Iuant interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.462V651-2007	6.5.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.462	6.5.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 462	6.5.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325462v651
TTA	TTAT.3G-25.462(R6-6.5.1)	6.5.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.462(R6-6.5.1)
Release 7					
ATIS	ATIS.3GPP.25.462V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.462	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 462	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325462v740
TTA	TTAT.3G-25.462(R7-7.4.0)	7.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.462(R7-7.4.0)
Release 8					
ATIS	ATIS.3GPP.25.462V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.462	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 462	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325462v810
TTA	TTAT.3G-25.462(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.462(R8-8.1.0)

5.1.2.3.33 TS 25.463**UTRAN Iuant Interface: Remote Electrical Tilting (RET) Antennas Application Part (RETAP) Signalling**

This document specifies the Remote Electrical Tilting Application Part (RETAP) between the implementation specific O&M function and the RET Antenna Control unit function of the Node B. It defines the Iuant interface and its associated signalling procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.463V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.463	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 463	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325463v670
TTA	TTAT.3G-25.463(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.463(R6-6.7.0)
Release 7					
ATIS	ATIS.3GPP.25.463V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.463	7.5.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 463	7.5.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325463v750
TTA	TTAT.3G-25.463(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.463(R7-7.5.0)

5.1.2.3.34 TS 25.466**UTRAN Iuant Interface: Application Part**

This document specifies the Remote Electrical Tilting Application Part (RETAP) between the implementation specific O&M transport function and the RET Antenna Control unit function of the Node B. The document also specifies the Tower Mounted Amplifier Application Part (TMAAP) between the implementation specific O&M transport function and the TMA control function of the Node B. It defines the Iuant interface and its associated signalling procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.25.466V730-2008	7.3.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.466	7.3.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 466	7.3.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325466v730
TTA	TTAT.3G-25.466(R7-7.3.0)	7.3.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.466(R7-7.3.0)
Release 8					
ATIS	ATIS.3GPP.25.466V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.466	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 466	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325466v830
TTA	TTAT.3G-25.466(R8-8.3.0)	8.3.0	Approved		http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.466(R8-8.3.0)

5.1.2.3.35 TS 25.467**UTRAN Architecture for 3G HNB**

The present document specifies the UTRAN architecture for 3G Home NodeB (3G HNB)

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-25.467	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25467-810.pdf
ATIS	ATIS.3GPP.25.467V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.467	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 467	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325467v810
TTA	TTAT.3G-25.467(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.467(R8-8.1.0)

5.1.2.3.36 TS 25.468**UTRAN Iuh Interface RUA signalling**

The present document specifies the RANAP User Adaption (RUA) between the Home Node B (HNB) and the Home Node B Gateway (HNB-GW).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD T63-25.468	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25468-810.pdf
ATIS	ATIS.3GPP.25.468V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.468	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 468	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325468v810
TTA	TTAT.3G-25.468(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.468(R8-8.1.0)

5.1.2.3.37 TS 25.469**UTRAN Iuh Interface HNBAP signalling**

The present document specifies the Home Node B Application Part (HNBAP) between the Home Node B (HNB) and the Home Node B Gateway (HNB-GW).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD T63-25.469	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25469-810.pdf
ATIS	ATIS.3GPP.25.469V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.469	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 469	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325469v810
TTA	TTAT.3G-25.469(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.469(R8-8.1.0)

5.1.2.4 25.100 series

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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5.1.2.4.1 TS 25.101**UE radio transmission and reception (FDD)**

This document establishes the minimum RF characteristics of the UTRA User Equipment (UE) operating in the FDD mode. The values in the TS make no allowance for measurement uncertainty in conformance testing. Test limits to be used for conformance testing are specified separately in the UE conformance test specifications TS 34.121.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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Release 99

ARIB	ARIB STD-T63-25.101	3.19.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25101-3j0.pdf
ATIS	ATIS.3GPP.25.101V3190-2007	3.19.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.101	3.19.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 101	3.19.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425101v3j0
TTA	TTAT.3G-25.101(R99F-3.19.0)	3.19.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.101(R99F-3.19.0)

Release 4

ARIB	ARIB STD-T63-25.101	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25101-4d0.pdf
ATIS	ATIS.3GPP.25.101V4130-2007	4.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.101	4.13.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 101	4.13.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425101v4d0
TTA	TTAT.3G-25.101(R4F-4.13.0)	4.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.101(R4F-4.13.0)

Release 5

ARIB	ARIB STD-T63-25.101	5.20.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25101-5k0.pdf
ATIS	ATIS.3GPP.25.101V5200-2007	5.20.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.101	5.20.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 101	5.20.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425101v5k0
TTA	TTAT.3G-25.101(R5F-5.20.0)	5.20.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.101(R5F-5.20.0)

Release 6

ARIB	ARIB STD-T63-25.101	6.19.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25101-6j0.pdf
ATIS	ATIS.3GPP.25.101V6190-2009	6.19.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.101	6.19.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 101	6.19.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425101v6j0
TTA	TTAT.3G-25.101(R6F-6.19.0)	6.19.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.101(R6F-6.19.0)

Release 7

ARIB	ARIB STD-T63-25.101	7.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25101-7f0.pdf
ATIS	ATIS.3GPP.25.101V7150-2009	7.15.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.101	7.15.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 101	7.15.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425101v7f0
TTA	TTAT.3G-25.101(R7F-7.15.0)	7.15.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.101(R7F-7.15.0)

Release 8

ARIB	ARIB STD-T63-25.101	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25101-860.pdf
ATIS	ATIS.3GPP.25.101V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.101	8.6.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 101	8.6.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425101v860
TTA	TTAT.3G-25.101(R8F-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.101(R8F-8.6.0)

5.1.2.4.2 TS 25.106**UTRA Repeater; Radio Transmission and Reception**

The present document establishes the minimum radio frequency performance of UTRA repeaters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 4					
ATIS	ATIS.3GPP.25.106V4100-2007	4.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.106	4.10.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 106	4.10.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425106v4a0
TTA	TTAT.3G-25.106(R4-4.10.0)	4.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.106(R4-4.10.0)
Release 5					
ATIS	ATIS.3GPP.25.106V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.106	5.13.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 106	5.13.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425106v5d0
TTA	TTAT.3G-25.106(R5-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.106(R5-5.13.0)
Release 6					
ATIS	ATIS.3GPP.25.106V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.106	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 106	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425106v670
TTA	TTAT.3G-25.106(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.106(R6-6.7.0)
Release 7					
ATIS	ATIS.3GPP.25.106V730-2007	7.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.106	7.3.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 106	7.3.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425106v730
TTA	TTAT.3G-25.106(R7-7.3.0)	7.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.106(R7-7.3.0)
Release 8					
ATIS	ATIS.3GPP.25.106V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.106	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 106	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425106v810
TTA	TTAT.3G-25.106(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.106(R8-8.1.0)

5.1.2.4.3 TS 25.133

Requirements for support of radio resource management (FDD)

This specification describes the requirements for support of radio resource management for FDD including requirements on measurements in UTRAN and the UE as well as on node dynamic behaviour and interaction, in terms of delay and response characteristics.

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Release 99					
ARIB	ARIB STD-T63-25.133	3.22.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25133-3m0.pdf
ATIS	ATIS.3GPP.25.133V3220-2006	3.22.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.133	3.22.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 133	3.22.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425133v3m0
TTA	TTAT.3G-25.133(R99F-3.22.0)	3.22.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.133(R99F-3.22.0)
Release 4					
ARIB	ARIB STD-T63-25.133	4.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25133-4h0.pdf
ATIS	ATIS.3GPP.25.133V4170-2007	4.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.133	4.17.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 133	4.17.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425133v4h0
TTA	TTAT.3G-25.133(R4F-4.17.0)	4.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.133(R4F-4.17.0)
Release 5					
ARIB	ARIB STD-T63-25.133	5.18.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25133-5i0.pdf
ATIS	ATIS.3GPP.25.133V5180-2007	5.18.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.133	5.18.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 133	5.18.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425133v5I0
TTA	TTAT.3G-25.133(R5F-5.18.0)	5.18.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.133(R5F-5.18.0)
Release 6					
ARIB	ARIB STD-T63-25.133	6.24.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25133-6o0.pdf
ATIS	ATIS.3GPP.25.133V6240-2009	6.24.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.133	6.24.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 133	6.24.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425133v6o0
TTA	TTAT.3G-25.133(R6F-6.24.0)	6.24.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.133(R6F-6.24.0)
Release 7					
ARIB	ARIB STD-T63-25.133	7.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25133-7e0.pdf
ATIS	ATIS.3GPP.25.133V7140-2009	7.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.133	7.14.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 133	7.14.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425133v7e0
TTA	TTAT.3G-25.133(R7F-7.14.0)	7.14.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.133(R7F-7.14.0)
Release 8					
ARIB	ARIB STD-T63-25.133	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25133-860.pdf
ATIS	ATIS.3GPP.25.133V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.133	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 133	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425133v860
TTA	TTAT.3G-25.133(R8F-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.133(R8F-8.6.0)

5.1.2.4.4 TS 25.104

BTS radio transmission and reception (FDD)

This specification describes the base station minimum RF characteristics of the FDD mode of UTRA. The values in the TS make no allowance for measurements uncertainties in conformance testing. Test limit to be used for conformance testing are specified separately in the BS conformance test Specification TS 25.141.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.104	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25104-3e0.pdf
ATIS	ATIS.3GPP.25.104V3140-2007	3.14.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.104	3.14.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 104	3.14.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425104v3e0
TTA	TTAT.3G-25.104(R99F-3.14.0)	3.14.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.104(R99F-3.14.0)
Release 4					
ARIB	ARIB STD-T63-25.104	4.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25104-490.pdf
ATIS	ATIS.3GPP.25.104V490-2007	4.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.104	4.9.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 104	4.9.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425104v490
TTA	TTAT.3G-25.104(R4F-4.9.0)	4.9.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.104(R4F-4.9.0)
Release 5					
ARIB	ARIB STD-T63-25.104	5.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25104-5d0.pdf
ATIS	ATIS.3GPP.25.104V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.104	5.13.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 104	5.13.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425104v5d0
TTA	TTAT.3G-25.104(R5F-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.104(R5F-5.13.0)
Release 6					
ARIB	ARIB STD-T63-25.104	6.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25104-6h0.pdf
ATIS	ATIS.3GPP.25.104V6170-2008	6.17.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.104	6.17.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 104	6.17.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425104v6h0
TTA	TTAT.3G-25.104(R6F-6.17.0)	6.17.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.104(R6F-6.17.0)
Release 7					
ARIB	ARIB STD-T63-25.104	7.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25104-7b0.pdf
ATIS	ATIS.3GPP.25.104V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.104	7.11.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 104	7.11.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425104v7b0
TTA	TTAT.3G-25.104(R7F-7.11.0)	7.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.104(R7F-7.11.0)
Release 8					
ARIB	ARIB STD-T63-25.104	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25104-860.pdf
ATIS	ATIS.3GPP.25.104V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.104	8.6.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 104	8.6.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425104v860
TTA	TTAT.3G-25.104(R8F-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.104(R8F-8.6.0)

5.1.2.4.5 TS 25.141

Base station conformance testing (FDD)

This specification describes the RF test methods and conformance requirements for UTRA base transceiver stations (BTS) operating in the FDD mode. These have been derived from, and are consistent with, the core UTRA specifications specified in the requirements reference subclause of each test. The maximum acceptable measurement uncertainty is specified in the TS for each test, where appropriate.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.141	3.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25141-3f0.pdf
ATIS	ATIS.3GPP.25.141V3150-2007	3.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.141	3.15.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 141	3.15.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425141v3f0
TTA	TTAT.3G-25.141(R99F-3.15.0)	3.15.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.141(R99F-3.15.0)
Release 4					
ARIB	ARIB STD-T63-25.141	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25141-4a0.pdf
ATIS	ATIS.3GPP.25.141V4100-2007	4.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.141	4.10.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 141	4.10.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425141v4a0
TTA	TTAT.3G-25.141(R4F-4.10.0)	4.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.141(R4F-4.10.0)
Release 5					
ARIB	ARIB STD-T63-25.141	5.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25141-5f0.pdf
ATIS	ATIS.3GPP.25.141V5150-2007	5.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.141	5.15.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 141	5.15.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425141v5f0
TTA	TTAT.3G-25.141(R5F-5.15.0)	5.15.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.141(R5F-5.15.0)
Release 6					
ARIB	ARIB STD-T63-25.141	6.19.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25141-6j0.pdf
ATIS	ATIS.3GPP.25.141V6190-2008	6.19.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.141	6.19.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 141	6.19.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425141v6j0
TTA	TTAT.3G-25.141(R6F-6.19.0)	6.19.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.141(R6F-6.19.0)
Release 7					
ARIB	ARIB STD-T63-25.141	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25141-7c0.pdf
ATIS	ATIS.3GPP.25.141V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.141	7.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 141	7.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425141v7c0
TTA	TTAT.3G-25.141(R7F-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.141(R7F-7.12.0)
Release 8					
ARIB	ARIB STD-T63-25.141	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25141-860.pdf
ATIS	ATIS.3GPP.25.141V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.141	8.6.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 141	8.6.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425141v860
TTA	TTAT.3G-25.141(R8F-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.141(R8F-8.6.0)

5.1.2.4.6 TS 25.113

Base station EMC (see Note 1)

This specification describes the assessment of base stations and associated ancillary equipment in respect of EMC. NOTE 1 – This specification does not include the antenna port immunity and emissions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.113	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25113-350.pdf
ATIS	T1.3GPP.25.113V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.113	3.5.0	Published	May 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 113	3.5.0	Published	May 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113UR5
TTA	TTAE.3G-25.113(R99-3.5.0)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.113(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-25.113	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25113-440.pdf
ATIS	T1.3GPP.25.113V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.113	4.4.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 113	4.4.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v440
TTA	TTAT.3G-25.113(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.113	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25113-550.pdf
ATIS	T1.3GPP.25.113V550-2004	5.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.113	5.5.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 113	5.5.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v550
TTA	TTAT.3G-25.113(R5-5.5.0)	5.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R5-5.5.0)
Release 6					
ARIB	ARIB STD-T63-25.113	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25113-640.pdf
ATIS	ATIS.3GPP.25.113V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.113	6.4.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 113	6.4.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v640
TTA	TTAT.3G-25.113(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R6-6.4.0)
Release 7					
ARIB	ARIB STD-T63-25.113	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25113-760.pdf
ATIS	ATIS.3GPP.25.113V760-2007	7.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.113	7.6.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 113	7.6.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v760
TTA	TTAT.3G-25.113(R7-7.6.0)	7.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R7-7.6.0)
Release 8					
ARIB	ARIB STD-T63-25.113	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25113-840.pdf
ATIS	ATIS.3GPP.25.113V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.113	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 113	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v840
TTA	TTAT.3G-25.113(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R8-8.4.0)

5.1.2.4.7 TS 25.143

UTRA Repeater; Conformance Testing

The present document specifies the Radio Frequency (RF) test methods and Minimum Requirements for UTRA Repeaters. These have been derived from, and are consistent with the UTRA Repeater specifications defined in TS 25.106.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 4					
ATIS	ATIS.3GPP.25.143V4120-2007	4.12.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.143	4.12.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 143	4.12.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425143v4c0
TTA	TTAT.3G-25.143(R4-4.12.0)	4.12.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.143(R4-4.12.0)
Release 5					
ATIS	ATIS.3GPP.25.143V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.143	5.13.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 143	5.13.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425143v5d0
TTA	TTAT.3G-25.143(R5-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.143(R5-5.13.0)
Release 6					
ATIS	ATIS.3GPP.25.143V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.143	6.7.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 143	6.7.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425143v670
TTA	TTAT.3G-25.143(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.143(R6-6.7.0)
Release 7					
ATIS	ATIS.3GPP.25.143V730-2007	7.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.143	7.3.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 143	7.3.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425143v730
TTA	TTAT.3G-25.143(R7-7.3.0)	7.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.143(R7-7.3.0)
Release 8					
ATIS	ATIS.3GPP.25.143V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.143	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 143	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425143v810
TTA	TTAT.3G-25.143(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.143(R8-8.1.0)

5.1.2.4.8 TS 25.171

Requirements for support of A-GPS (FDD)

The present document establishes the minimum performance requirements for A-GPS for FDD mode of UTRA for the User Equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-25.171	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25171-630.pdf
ATIS	ATIS.3GPP.25.171V630-2007	6.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.171	6.3.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 171	6.3.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425171v630
TTA	TTAT.3G-25.171(R6F-6.3.0)	6.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.171(R6F-6.3.0)
Release 7					
ARIB	ARIB STD-T63-25.171	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25171-710.pdf
ATIS	ATIS.3GPP.25.171V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.171	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 171	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425171v710
TTA	TTAT.3G-25.171(R7F-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.171(R7F-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.171	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25171-800.pdf
ATIS	ATIS.3GPP.25.171V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.171	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 171	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425171v800
TTA	TTAT.3G-25.171(R8F-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.171(R8F-8.0.0)

5.1.2.4.9 TS 25.144

User Equipment (UE) and Mobile Station (MS) over the air performance requirements

The present document establishes Over the Air antenna minimum requirements for User Equipment (UE) and Mobile Station (MS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ARIB	ARIB STD-T63-25.144	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25144-700.pdf
CCSA	CCSA-TSD-DS-25.144	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 144	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0425144v700
Release 8					
ARIB	ARIB STD-T63-25.144	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25144-810.pdf
ATIS	ATIS.3GPP.25.144V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.144	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 144	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425144v810
TTA	TTAT.3G-25.144(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.144(R8-8.1.0)

5.1.2.4.10 TS 25.111**Location Measurement Unit (LMU) performance specification; User Equipment (UE) positioning in UTRAN**

The present document establishes the Location Measurement Unit (LMU) minimum RF characteristics of the FDD mode of UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ARIB	ARIB STD-T63-25.111	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25111-710.pdf
CCSA	CCSA-TSD-DS-25.111	7.1.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 111	7.1.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0425111v710
Release 8					
ARIB	ARIB STD-T63-25.111	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25111-800.pdf
ATIS	ATIS.3GPP.25.111V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-25.111	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 125 111	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425111v800
TTA	TTAT.3G-25.111(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.111(R8-8.0.0)

5.1.2.5 34.100 series**5.1.2.5.1 TS 34.108****Common Test Environments for User Equipment (UE) Conformance Testing**

This document contains definitions of reference conditions and test signals, default parameters, reference Radio Bearer configurations, common requirements for test equipment and generic set-up procedures for use in UE conformance tests.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.108	3.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34108-3g0.pdf
ATIS	ATIS.3GPP.34.108V3160-2005	3.16.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.108	3.16.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 108	3.16.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134108v3g0
TTA	TTAT.3G-34.108(R99-3.16.0)	3.16.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R99-3.16.0)
Release 4					
ARIB	ARIB STD-T63-34.108	4.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34108-4b0.pdf
ATIS	ATIS.3GPP.34.108V4110-2005	4.11.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.108	4.11.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 108	4.11.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134108v4b0
TTA	TTAT.3G-34.108(R4-4.11.0)	4.11.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R4-4.11.0)

Release 5

ARIB	ARIB STD-T63-34.108	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34108-560.pdf
ATIS	ATIS.3GPP.34.108V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.108	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 108	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v560
TTA	TTAT.3G-34.108(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-34.108	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34108-660.pdf
ATIS	ATIS.3GPP.34.108V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.108	6.6.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 108	6.6.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v660
TTA	TTAT.3G-34.108(R6-6.6.0)	6.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R6-6.6.0)

Release 7

ARIB	ARIB STD-T63-34.108	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34108-720.pdf
ATIS	ATIS.3GPP.34.108V720-2007	7.2.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.108	7.2.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 108	7.2.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v720
TTA	TTAT.3G-34.108(R7-7.2.0)	7.2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R7-7.2.0)

Release 8

ARIB	ARIB STD-T63-34.108	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34108-860.zip
ATIS	ATIS.3GPP.34.108V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.108	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 108	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v860
TTA	TTAT.3G-34.108(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R8-8.6.0)

5.1.2.5.2 TS 34.109**Logical Test Interface (TDD and FDD)**

This document specifies for User Equipment (UE), in UMTS system, for FDD and TDD modes, those UE functions that are required for conformance testing purposes.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.109	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34109-3a0.pdf
ATIS	ATIS.3GPP.34.109V3100-2005	3.10.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.109	3.10.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 109	3.10.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v3a0
TTA	TTAT.3G-34.109(R99-3.10.0)	3.10.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-34.109	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34109-460.pdf
ATIS	ATIS.3GPP.34.109V460-2005	4.6.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.109	4.6.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 109	4.6.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v460
TTA	TTAT.3G-34.109(R4-4.6.0)	4.6.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R4-4.6.0)

Release 5

ARIB	ARIB STD-T63-34.109	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34109-550.pdf
ATIS	ATIS.3GPP.34.109V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.109	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 109	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v550
TTA	TTAT.3G-34.109(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R5-5.5.0)

Release 6

ARIB	ARIB STD-T63-34.109	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34109-640.pdf
ATIS	ATIS.3GPP.34.109V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.109	6.4.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 109	6.4.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v640
TTA	TTAT.3G-34.109(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R6-6.4.0)

Release 7

ARIB	ARIB STD-T63-34.109	7.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34109-730.pdf
ATIS	ATIS.3GPP.34.109V730-2009	7.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.109	7.3.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 109	7.3.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v730
TTA	TTAT.3G-34.109(R7-7.3.0)	7.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R7-7.3.0)

Release 8

ARIB	ARIB STD-T63-34.109	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34109-800.pdf
ATIS	ATIS.3GPP.34.109V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.109	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 109	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v800
TTA	TTAT.3G-34.109(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R8-8.0.0)

5.1.2.5.3 TS 34.121**Terminal Conformance Specification, Radio Transmission and Reception (FDD)**

This document specifies the Radio Frequency (RF) test methods and conformance requirements for UTRA User Equipment (UE) operating in the FDD mode. These have been derived from, and are consistent with, the core UTRA specifications. The maximum acceptable measurement uncertainty is specified in the TS for each test, where appropriate.

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Release 99					
ARIB	ARIB STD-T63-34.121	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34121-3e0.pdf
ATIS	T1.3GPP.34.121V3140-2004	3.14.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.121	3.14.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 121	3.14.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134121v3e0
TTA	TTAT.3G-34.121(R99F-3.14.0)	3.14.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.121(R99F-3.14.0)

Release 4

ARIB	ARIB STD-T63-34.121	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34121-410.pdf
ATIS	T1.3GPP.34.121V410-2004	4.1.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.121	4.1.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 121	4.1.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134121v410
TTA	TTAT.3G-34.121(R4F-4.1.0)	4.1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.121(R4F-4.1.0)

Release 5

ARIB	ARIB STD-T63-34.121	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34121-570.pdf
ATIS	ATIS.3GPP.34.121V570-2006	5.7.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.121	5.7.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 121	5.7.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534121v570
TTA	TTAT.3G-34.121(R5F-5.7.0)	5.7.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.121(R5F-5.7.0)

Release 6

ARIB	ARIB STD-T63-34.121	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34121-640.pdf
ATIS	ATIS.3GPP.34.121V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.121	6.4.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 121	6.4.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534121v640
TTA	TTAT.3G-34.121(R6F-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.121(R6F-6.4.0)

5.1.2.5.4 TS 34.123-1**UE Conformance Specification, Part 1 – Conformance specification**

This document specifies the protocol conformance testing for the 3rd Generation User Equipment (UE). This is the first part of a multi-part test specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.123-1	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34123-1-350.pdf
ATIS	T1.3GPP.34.123-1V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-1	3.5.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-1	3.5.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-1UR6
TTA	TTAE.3G-34.123-1(R99350)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-34.123-1(R99350)
Release 4					
ARIB	ARIB STD-T63-34.123-1	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34123-1-430.pdf
ATIS	T1.3GPP.34.123-1V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-1	4.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-1	4.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-1v430
TTA	TTAT.3G-34.123-1(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-34.123-1	5.13.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34123-1-5d1.pdf
ATIS	ATIS.3GPP.34.123-1V5131-2006	5.13.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-1	5.13.1	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-1	5.13.1	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v5d1
TTA	TTAT.3G-34.123-1(R5-5.13.1)	5.13.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R5-5.13.1)

Release 6

ARIB	ARIB STD-T63-34.123-1	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34123-1-670.pdf
ATIS	ATIS.3GPP.34.123-1V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-1	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-1	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v670
TTA	TTAT.3G-34.123-1(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R6-6.7.0)

Release 7

ARIB	ARIB STD-T63-34.123-1	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34123-1-710.pdf
ATIS	ATIS.3GPP.34.123-1V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-1	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-1	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v710
TTA	TTAT.3G-34.123-1(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R7-7.1.0)

Release 8

ARIB	ARIB STD-T63-34.123-1	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34123-1-860.zip
ATIS	ATIS.3GPP.34.123-1V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-1	8.6.0	Published	May 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-1	8.6.0	Published	May 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v860
TTA	TTAT.3G-34.123-1(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R8-8.6.0)

5.1.2.5.5 TS 34.123-2**UE Conformance Specification, Part 2 – ICS**

This document provides the Implementation Conformance Statement (ICS) proforma for 3rd Generation User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 and ETS 300 406. This document also specifies a recommended applicability statement for the test cases included in TS 34.123-1. These applicability statements are based on the features implemented in the UE.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.123-2	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34123-2-350.pdf
ATIS	T1.3GPP.34.123-2V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-2	3.5.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-2	3.5.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-2UR4
TTA	TTAE.3G-34.123-2(R99350)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-34.123-2(R99350)
Release 4					
ARIB	ARIB STD-T63-34.123-2	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34123-2-430.pdf
ATIS	T1.3GPP.34.123-2V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-2	4.3.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-2	4.3.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-2v430
TTA	TTAT.3G-34.123-2(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R4-4.3.0)

Release 5

ARIB	ARIB STD-T63-34.123-2	5.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34123-2-5d0.pdf
ATIS	ATIS.3GPP.34.123-2V5130-2006	5.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-2	5.13.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-2	5.13.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v5d0
TTA	TTAT.3G-34.123-2(R5-5.13.0)	5.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R5-5.13.0)

Release 6

ARIB	ARIB STD-T63-34.123-2	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34123-2-670.pdf
ATIS	ATIS.3GPP.34.123-2V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-2	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-2	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v670
TTA	TTAT.3G-34.123-2(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R6-6.7.0)

Release 7

ARIB	ARIB STD-T63-34.123-2	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34123-2-710.pdf
ATIS	ATIS.3GPP.34.123-2V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-2	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-2	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v710
TTA	TTAT.3G-34.123-2(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R7-7.1.0)

Release 8

ARIB	ARIB STD-T63-34.123-2	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34123-2-860.zip
ATIS	ATIS.3GPP.34.123-2V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.123-2	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 123-2	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v860
TTA	TTAT.3G-34.123-2(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R8-8.6.0)

5.1.2.5.6 TS 34.124**Electromagnetic compatibility (EMC) requirements for Mobile terminals and ancillary equipment**

This document establishes the essential EMC requirements for “3rd generation” digital cellular mobile terminal equipment and ancillary accessories in combination with a 3GPP user equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.124	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34124-340.pdf
ATIS	T1.3GPP.34.124V340-2004	3.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.124	3.4.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 124	3.4.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v340
TTA	TTAT.3G-34.124(R99-3.4.0)	3.4.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R99-3.4.0)
Release 4					
ARIB	ARIB STD-T63-34.124	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34124-420.pdf
ATIS	T1.3GPP.34.124V420-2004	4.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.124	4.2.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 124	4.2.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v420
TTA	TTAT.3G-34.124(R4-4.2.0)	4.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R4-4.2.0)

Release 5

ARIB	ARIB STD-T63-34.124	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34124-540.pdf
ATIS	ATIS.3GPP.34.124V540-2005	5.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.124	5.4.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 124	5.4.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v540
TTA	TTAT.3G-34.124(R5-5.4.0)	5.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R5-5.4.0)

Release 6

ARIB	ARIB STD-T63-34.124	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34124-620.pdf
ATIS	ATIS.3GPP.34.124V620-2007	6.2.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.124	6.2.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 124	6.2.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v620
TTA	TTAT.3G-34.124(R6-6.2.0)	6.2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-34.124	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34124-750.pdf
ATIS	ATIS.3GPP.34.124V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.124	7.5.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 124	7.5.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v750
TTA	TTAT.3G-34.124(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-34.124	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34124-830.pdf
ATIS	ATIS.3GPP.34.124V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.124	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 124	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v830
TTA	TTAT.3G-34.124(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R8-8.3.0)

5.1.2.6 36.200 series

5.1.2.6.1 TS 36.201

Evolved Universal Terrestrial Radio Access (E-UTRA); Long Term Evolution (LTE) physical layer; General description

This specification describes an overview of the physical layer of the EUTRA radio interface.

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Release 8					
ARIB	ARIB STD-T63-36.201	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36201-830.pdf
ATIS	ATIS.3GPP.36.201V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.201	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 201	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136201v830
TTA	TTAT.3G-36.201(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.201(R8-8.3.0)

5.1.2.6.2 TS 36.211**Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation**

This specification describes the physical channels for evolved UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.211	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36211-860.pdf
ATIS	ATIS.3GPP.36.211V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.211	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 211	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136211v860
TTA	TTAT.3G-36.211(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.211(R8-8.6.0)

5.1.2.6.3 TS 36.212**Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding**

This specification describes the coding, multiplexing and mapping to physical channels for E_UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.212	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36212-860.pdf
ATIS	ATIS.3GPP.36.212V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.212	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 212	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136212v860
TTA	TTAT.3G-36.212(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.212(R8-8.6.0)

5.1.2.6.4 TS 36.213**Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures**

This specification describes the characteristics of the physical layer procedures of E-UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.213	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36213-860.pdf
ATIS	ATIS.3GPP.36.213V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.213	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 213	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136213v860
TTA	TTAT.3G-36.213(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.213(R8-8.6.0)

5.1.2.6.5 TS 36.214**Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer; Measurements**

This specification describes the measurements done at the UE and network in order to support operation in idle mode and connected mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.214	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36214-860.pdf
ATIS	ATIS.3GPP.36.214V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.214	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 214	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136214v860
TTA	TTAT.3G-36.214(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.214(R8-8.6.0)

5.1.2.7 36.300 series**5.1.2.7.1 TS 36.300****Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description (Stage 2)**

This specification describes an overview and overall description of the E-UTRA radio interface and E-UTRAN architecture and radio interface protocol architecture.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.300	8.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36300-880.pdf
ATIS	ATIS.3GPP.36.300V880-2009	8.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.300	8.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 300	8.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236300v880
TTA	TTAT.3G-36.300(R8-8.8.0)	8.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.300(R8-8.8.0)

5.1.2.7.2 TS 36.302**Evolved Universal Terrestrial Radio Access (E-UTRA); Services provided by the physical layer**

This specification describes the services provided by the physical layer of E-UTRA to upper layers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.302	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36302-810.pdf
ATIS	ATIS.3GPP.36.302V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.302	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 302	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236302v810
TTA	TTAT.3G-36.302(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.302(R8-8.1.0)

5.1.2.7.3 TS 36.304**Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) procedures in idle mode**

This specification describes the Access Stratum (AS) part of the Idle Mode procedures applicable to a UE and the model for the functional division between the NAS and AS in a UE.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.304	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36304-850.pdf
ATIS	ATIS.3GPP.36.304V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.304	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 304	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236304v850
TTA	TTAT.3G-36.304(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.304(R8-8.5.0)

5.1.2.7.4 TS 36.306**Evolved Universal Terrestrial Radio Access (E-UTRA); UE Radio Access Capabilities**

This specification defines the E-UTRA UE Radio Access Capability Parameters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.306	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36306-830.pdf
ATIS	ATIS.3GPP.36.306V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.306	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 306	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236306v830
TTA	TTAT.3G-36.306(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.306(R8-8.3.0)

5.1.2.7.5 TS 36.314**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Layer 2 - Measurements**

The present document contains the description and definition of the measurements performed by E-UTRAN that are transferred over the standardised interfaces in order to support E-UTRA radio link operations, radio resource management (RRM), network operations and maintenance (OAM), and self-organising networks (SON).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.314	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36314-810.pdf
ATIS	ATIS.3GPP.36.314V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.314	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 314	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236314v810
TTA	TTAT.3G-36.314(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.314(R8-8.1.0)

5.1.2.7.6 TS 36.321**Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification**

This specification describes the E-UTRA MAC protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.321	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36321-850.pdf
ATIS	ATIS.3GPP.36.321V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.321	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 321	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236321v850
TTA	TTAT.3G-36.321(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.321(R8-8.5.0)

5.1.2.7.7 TS 36.322**Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification**

This specification describes the E-UTRA Radio Link Control (RLC) protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.322	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36322-850.pdf
ATIS	ATIS.3GPP.36.322V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.322	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 322	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236322v850
TTA	TTAT.3G-36.322(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.322(R8-8.5.0)

5.1.2.7.8 TS 36.323**Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification**

This specification describes the Packet Data Convergence Protocol (PDCP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.323	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36323-850.pdf
ATIS	ATIS.3GPP.36.323V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.323	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 323	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236323v850
TTA	TTAT.3G-36.323(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.323(R8-8.5.0)

5.1.2.7.9 TS 36.331**Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) protocol specification**

This specification describes the Radio Resource Control protocol for the UE-eUTRAN radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.331	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36331-850.pdf
ATIS	ATIS.3GPP.36.331V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.331	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 331	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236331v850
TTA	TTAT.3G-36.331(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.331(R8-8.5.0)

5.1.2.8 36.400 series**5.1.2.8.1 TS 36.401****Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture description**

This specification describes the overall architecture of the EUTRAN, including internal interfaces and assumptions on the radio, S1 and X2 interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.401	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36401-850.pdf
ATIS	ATIS.3GPP.36.401V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.401	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 401	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336401v850
TTA	TTAT.3G-36.401(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.401(R8-8.5.0)

5.1.2.8.2 TS 36.410**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 general aspects and principles**

This specification provides an introduction to the 3GPP TS 36.41x series of technical specifications that define the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.410	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36410-820.pdf
ATIS	ATIS.3GPP.36.410V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.410	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 410	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336410v820
TTA	TTAT.3G-36.410(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.410(R8-8.2.0)

5.1.2.8.3 TS 36.411**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 layer 1**

This specification describes the standards allowed to implement Layer 1 on the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.411	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36411-810.pdf
ATIS	ATIS.3GPP.36.411V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 411	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336411v810
TTA	TTAT.3G-36.411(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.411(R8-8.1.0)

5.1.2.8.4 TS 36.412**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 signalling transport**

This specification describes the Signalling Transport to be used across S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.412	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36412-850.pdf
ATIS	ATIS.3GPP.36.412V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.412	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 412	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336412v850
TTA	TTAT.3G-36.412(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.412(R8-8.5.0)

5.1.2.8.5 TS 36.413**Evolved Universal Terrestrial Access (E-UTRA) ; S1 Application Protocol (S1 AP)**

This specification describes the E-UTRAN radio network layer signalling protocol for the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.413	8.5.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36413-851.pdf
ATIS	ATIS.3GPP.36.413V851-2009	8.5.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.413	8.5.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 413	8.5.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336413v851
TTA	TTAT.3G-36.413(R8-8.5.1)	8.5.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.413(R8-8.5.1)

5.1.2.8.6 TS 36.414**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 data transport**

This specification describes the standards for user data transport protocols and related signalling protocols to establish user plane transport bearers over the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.414	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36414-840.pdf
ATIS	ATIS.3GPP.36.414V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.414	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 414	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336414v840
TTA	TTAT.3G-36.414(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.414(R8-8.4.0)

5.1.2.8.7 TS 36.420**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 general aspects and principles**

This specification provides an introduction to the TSG RAN TS 36.42x series of UMTS Technical Specifications that define the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.420	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36420-810.pdf
ATIS	ATIS.3GPP.36.420V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.420	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 420	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336420v810
TTA	TTAT.3G-36.414(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.414(R8-8.1.0)

5.1.2.8.8 TS 36.421**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 layer 1**

This specification describes the standards allowed to implement Layer 1 on the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.421	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36421-800.pdf
ATIS	ATIS.3GPP.36.421V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.421	8.0.0	Published	Nov 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 421	8.0.0	Published	Nov 08	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0336421v800
TTA	TTAT.3G-36.421(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.421(R8-8.0.0)

5.1.2.8.9 TS 36.422**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 signalling transport**

This specification describes the Signalling Transport to be used across X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.422	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36422-850.pdf
ATIS	ATIS.3GPP.36.422V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.422	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 422	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336422v850
TTA	TTAT.3G-36.422(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.422(R8-8.5.0)

5.1.2.8.10 TS 36.423**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 Application Protocol (X2AP)**

This specification describes the E-UTRAN radio network layer signalling protocol for the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.423	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36423-850.pdf
ATIS	ATIS.3GPP.36.423V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.423	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 423	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336423v850
TTA	TTAT.3G-36.423(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.423(R8-8.5.0)

5.1.2.8.11 TS 36.424**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 data transport**

This specification describes the standards for user data transport protocols and related signalling protocols to establish user plane transport bearers over the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.424	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36424-850.pdf
ATIS	ATIS.3GPP.36.424V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.424	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 424	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336424v850
TTA	TTAT.3G-36.424(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.424(R8-8.5.0)

5.1.2.9 36.100 series**5.1.2.9.1 TS 36.101****Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception**

This specification describes the User Equipment (UE) minimum RF characteristics of E-UTRA for both FDD and TDD modes.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.101	8.5.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36101-851.pdf
ATIS	ATIS.3GPP.36.101V851-2009	8.5.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.101	8.5.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 101	8.5.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436101v851
TTA	TTAT.3G-36.101(R8-8.5.1)	8.5.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.101(R8-8.5.1)

5.1.2.9.2 TS 36.104**Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception**

This specification describes the Base Station minimum RF characteristics of E-UTRA in paired and unpaired bands.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.104	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36104-850.pdf
ATIS	ATIS.3GPP.36.104V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.104	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 104	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436104v850
TTA	TTAT.3G-36.104(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.104(R8-8.5.0)

5.1.2.9.3 TS 36.106**Evolved Universal Terrestrial Radio Access (E-UTRA); Repeater radio transmission and reception**

The present document establishes the minimum RF characteristics of E-UTRA FDD Repeater.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.36.106V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.106	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 106	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436106v810
TTA	TTAT.3G-36.106(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.106(R8-8.1.0)

5.1.2.9.4 TS 36.113**Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) and repeater ElectroMagnetic Compatibility (EMC)**

The present document covers the assessment of E-UTRA base stations, repeaters and associated ancillary equipment in respect of Electromagnetic Compatibility (EMC).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.113	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36113-810.pdf
ATIS	ATIS.3GPP.36.113V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ATIS	ATIS.3GPP.36.124V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.113	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 113	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0436113v810
TTA	TTAT.3G-36.113(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.113(R8-8.1.0)

5.1.2.9.5 TS 36.124**Evolved Universal Terrestrial Radio Access (E-UTRA); Electromagnetic compatibility (EMC) requirements for mobile terminals and ancillary equipment**

The present document establishes the essential EMC requirements for “3rd generation” digital cellular mobile terminal equipment and ancillary accessories in combination with a 3GPP E-UTRA user equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.124	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36124-800.pdf
ATIS	ATIS.3GPP.36.124V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.124	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 124	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0436124v800
TTA	TTAT.3G-36.124(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.124(R8-8.0.0)

5.1.2.9.6 TS 36.141**Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) conformance testing**

The present document specifies the Radio Frequency (RF) test methods and conformance requirements for E-UTRA Base Stations (BS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.141	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36141-820.pdf
ATIS	ATIS.3GPP.36.141V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.141	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 141	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436141v820
TTA	TTAT.3G-36.141(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.141(R8-8.2.0)

5.1.2.9.7 TS 36.133**Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management**

This specification specifies requirements for support of Radio Resource Management for the FDD and TDD modes of Evolved UTRA. These requirements include requirements on measurements in UTRAN and the UE as well as requirements on node dynamical behaviour and interaction, in terms of delay and response characteristics.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.133	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36133-850.pdf
ATIS	ATIS.3GPP.36.133V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.133	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 133	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436133v850
TTA	TTAT.3G-36.133(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.133(R8-8.5.0)

5.1.2.10 36.500 series**5.1.2.10.1 TS 36.508****Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Common test environments for User Equipment (UE) conformance testing**

The present document contains definitions of reference conditions and test signals, default parameters, reference radio bearer configurations used in radio bearer interoperability testing, common radio bearer configurations for other test purposes, common requirements for test equipment and generic set-up procedures for use in conformance tests for the 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.508	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36508-810.zip
ATIS	ATIS.3GPP.36.508V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-36.508	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 136 508	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536508v810
TTA	TTAT.3G-36.508(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.508(R8-8.1.0)

5.1.2.10.2 TS 36.509**Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Special conformance testing function for User Equipment (UE)**

The present document defines for 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE) those special functions and their activation methods that are required in User Equipment (UE) for conformance testing purposes.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.509	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36509-810.pdf
ATIS	ATIS.3GPP.36.509V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 509	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536509v810
TTA	TTAT.3G-36.509(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.509(R8-8.1.0)

5.1.2.10.3 TS 36.521-1**Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: conformance testing**

The present document specifies the measurement procedures for the conformance test of the 3rd Generation EPS (E-UTRA/EPC) compliant user equipment (UE) that contain transmitting characteristics, receiving characteristics and performance requirements

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.521-1	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36521-1-810.pdf
ATIS	ATIS.3GPP.36.521-1V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 521-1	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536521-1v810
TTA	TTAT.3G-36.521-1(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.521-1(R8-8.1.0)

5.1.2.10.4 TS 36.521-2**Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 2: Implementation Conformance Statement (ICS)**

The present document provides the Implementation Conformance Statement (ICS) proforma and recommended Test Case (TC) applicability for 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 and ISO/IEC 9646-7.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.521-2	8.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36521-2-801.pdf
ATIS	ATIS.3GPP.36.521-2V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 521-2	8.0.1	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0536521-2v801
TTA	TTAT.3G-36.521-2(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.521-2(R8-8.0.1)

5.1.2.10.5 TS 36.523-1**Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 1: Protocol conformance specification**

The present document specifies the protocol conformance testing for the 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.523-1	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36523-1-810.pdf
ATIS	ATIS.3GPP.36.523-1V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 523-1	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536523-1v810
TTA	TTAT.3G-36.523-1(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.523-1(R8-8.1.0)

5.1.2.10.6 TS 36.523-2**Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 2: ICS**

The present document provides the Implementation Conformance Statement (ICS) proforma and recommended Test Case (TC) applicability for 3rd Generation User Equipment (UE), in compliance with the relevant EPS (E-UTRA/EPC) requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 and ISO/IEC 9646-7.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.523-2	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36523-2-810.pdf
ATIS	ATIS.3GPP.36.523-2V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 523-2	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536523-2v810
TTA	TTAT.3G-36.523-2(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.523-2(R8-8.1.0)

5.1.2.11 Core network aspects**5.1.2.11.1 TS 23.108****Mobile radio interface Layer 3 specification core network protocols – Stage 2**

This specification describes the procedures used at the radio interface for Call Control (CC), Mobility Management (MM) and Session Management (SM). It contains examples of the structured procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
TTC	TS-3GA-23.108(R99)v3.2.0	3.2.0	Published	Oct 00	http://www.ttc.or.jp/imt/ts/ts23108r99v320.pdf
ATIS	T1.3GPP.23.108V320-2002	3.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.108	3.2.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 108	3.2.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108UR1
TTA	TTAE.3G-23.108(R99)	3.2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.108(R99)

Release 4

ATIS	T1.3GPP.23.108V401-2004	4.0.1	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.108	4.0.1	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 108	4.0.1	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108v401
TTA	TTAT.3G-23.108(R4-4.0.1)	4.0.1	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R4-4.0.1)
TTC	TS-3GA-23.108(Rel4)v4.0.0	4.0.0	Published	Oct 00	http://www.ttc.or.jp/imt/ts/ts23108rel4v400.pdf

Release 5

ATIS	T1.3GPP.23.108V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.108	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 108	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108v500
TTA	TTAT.3G-23.108(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R5-5.0.0)
TTC	TS-3GA-23.108(Rel5)v5.0.0	5.0.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts23108rel5v500.pdf

Release 6

ATIS	ATIS.3GPP.23.108V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.108	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 108	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108v600
TTA	TTAT.3G-23.108(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R6-6.0.0)
TTC	TS-3GA-23.108(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts23108rel6v600.pdf

Release 7

ATIS	ATIS.3GPP.23.108V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.108	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 108	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123108v700
TTA	TTAT.3G-23.108(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R7-7.0.0)
TTC	TS-3GA-23.108(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23108rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.23.108V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.108	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 108	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123108v800
TTA	TTAT.3G-23.108(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R8-8.0.0)
TTC	TS-3GA-23.108(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23108rel8v800.pdf

5.1.2.11.2 TS 23.110

UMTS access stratum services and functions

This specification describes the detailed specifications of the protocols which rule the information flows, both control and user data, between the access stratum and the parts of UMTS outside the access stratum, and of the detailed specifications of the UTRAN. These detailed specifications are to be found in other technical specifications.

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Release 99					
ATIS	T1.3GPP.23.110V340-2002	3.4.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.110	3.4.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 110	3.4.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110UR1
TTA	TTAE.3G-23.110(R99)	3.4.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.110(R99)
TTC	TS-3GA-23.110(R99)v3.4.0	3.4.0	Published	Oct 00	http://www.ttc.or.jp/imt/ts/ts23110r99v340.pdf
Release 4					
ATIS	T1.3GPP.23.110V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.110	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 110	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110Uv4
TTA	TTAE.3G-23.110(R4)	4.0.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.110(R4)
TTC	TS-3GA-23.110(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts23110rel4v400.pdf
Release 5					
ATIS	T1.3GPP.23.110V500-2004	5.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.110	5.0.0	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 110	5.0.0	Published	Dec 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v500
TTA	TTAT.3G-23.110(R5-5.0.0)	5.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R5-5.0.0)
TTC	TS-3GA-23.110(Rel5)v5.0.0	5.0.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts23110rel5v500.pdf
Release 6					
ATIS	ATIS.3GPP.23.110V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.110	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 110	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v600
TTA	TTAT.3G-23.110(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R6-6.0.0)
TTC	TS-3GA-23.110(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts23110rel6v600.pdf
Release 7					
ATIS	ATIS.3GPP.23.110V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.110	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 110	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v700
TTA	TTAT.3G-23.110(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R7-7.0.0)
TTC	TS-3GA-23.110(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23110rel7v700.pdf
Release 8					
ATIS	ATIS.3GPP.23.110V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.110	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 110	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v800
TTA	TTAT.3G-23.110(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R8-8.0.0)
TTC	TS-3GA-23.110(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23110rel8v800.pdf

5.1.2.11.3 TS 23.122

Functions related to Mobile Stations (MS) in idle mode and group receive mode

This specification provides an overview of the tasks undertaken by a Mobile Station (MS) when in idle mode, that is, switched on but not having a dedicated channel allocated, e.g. not making or receiving a call, or when in group receive mode, that is, receiving a group call or broadcast call but not having a dedicated connection. It also describes the corresponding network functions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.122V3100-2004	3.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.122	3.10.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 122	3.10.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123122v3a0
TTA	TTAT.3G-23.122(R99-3.10.0)	3.10.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R99-3.10.0)
TTC	TS-3GA-23.122(R99)v3.10.0	3.10.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23122r99v3a0.pdf
Release 4					
ATIS	T1.3GPP.23.122V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.122	4.4.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 122	4.4.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123122v440
TTA	TTAT.3G-23.122(R4-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R4-4.4.0)
TTC	TS-3GA-23.122(Rel4)v4.4.0	4.4.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23122rel4v440.pdf
Release 5					
ATIS	T1.3GPP.23.122V530-2004	5.3.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.122	5.3.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 122	5.3.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123122v530
TTA	TTAT.3G-23.122(R5-5.3.0)	5.3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R5-5.3.0)
TTC	TS-3GA-23.122(Rel5)v5.3.0	5.3.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23122rel5v530.pdf
Release 6					
ATIS	ATIS.3GPP.23.122V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.122	6.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 122	6.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123122v650
TTA	TTAT.3G-23.122(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R6-6.5.0)
TTC	TS-3GA-23.122(Rel6)v6.5.0	6.5.0	Published	Jul 05	http://www.ttc.or.jp/imt/ts/ts23122rel6v650.pdf
Release 7					
ATIS	ATIS.3GPP.23.122V7121-2008	7.12.1	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.122	7.12.1	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 122	7.12.1	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123122v7c1
TTA	TTAT.3G-23.122(R7-7.12.1)	7.12.1	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R7-7.12.1)
TTC	TS-3GA-23.122(Rel7)v7.12.1	7.12.1	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts23122rel7v7c1.pdf
Release 8					
ATIS	ATIS.3GPP.23.122V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.122	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 122	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123122v850
TTA	TTAT.3G-23.122(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R8-8.5.0)
TTC	TS-3GA-23.122(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23122rel8v850.pdf

5.1.2.11.4 TS 24.007

Mobile radio interface signalling Layer 3 – general aspects

This specification describes the principal architecture of Layer 3 and its sub-layers on the GSM Um interface, i.e. the interface between mobile station (MS) and network; for the CM sub-layer, the description is restricted to paradigmatic examples, CC, supplementary services, and short message services for non-general packet radio service (GPRS) services. It also defines the basic message format and error handling applied by the Layer 3 protocols.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.007V3100-2005	3.10.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.007	3.10.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 007	3.10.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124007v3a0
TTA	TTAT.3G-24.007(R99-3.10.0)	3.10.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R99-3.10.0)
TTC	TS-3GA-24.007(R99)v3.10.0	3.10.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts24007r99v3a0.pdf
Release 4					
ATIS	ATIS.3GPP.24.007V440-2005	4.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.007	4.4.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 007	4.4.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124007v440
TTA	TTAT.3G-24.007(R4-4.4.0)	4.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R4-4.4.0)
TTC	TS-3GA-24.007(Rel4)v4.4.0	4.4.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24007rel4v440.pdf
Release 5					
ATIS	ATIS.3GPP.24.007V540-2006	5.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.007	5.4.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 007	5.4.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v540
TTA	TTAT.3G-24.007(R5-5.4.0)	5.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R5-5.4.0)
TTC	TS-3GA-24.007(Rel5)v5.4.0	5.4.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts24007rel5v540.pdf
Release 6					
ATIS	ATIS.3GPP.24.007V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.007	6.5.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 007	6.5.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v650
TTA	TTAT.3G-24.007(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R6-6.5.0)
TTC	TS-3GA-24.007(Rel6)v6.5.0	6.5.0	Published	Nov 05	http://www.ttc.or.jp/imt/ts/ts24007rel6v650.pdf
Release 7					
ATIS	ATIS.3GPP.24.007V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.007	7.0.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 007	7.0.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v700
TTA	TTAT.3G-24.007(R7-7.0.0)	7.0.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R7-7.0.0)
TTC	TS-3GA-24.007(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24007rel7v700.pdf
Release 8					
ATIS	ATIS.3GPP.24.007V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.007	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 007	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v810
TTA	TTAT.3G-24.007(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R8-8.1.0)
TTC	TS-3GA-24.007(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24007rel8v810.pdf

5.1.2.11.5 TS 24.008**Mobile radio interface Layer 3 specification; core network protocols – Stage 3**

This specification describes the procedures used at the radio interface for Call Control, Mobility Management and Session Management. The procedures currently described are for the CC of circuit-switched connections, SM for GPRS services, MM and radio resource management for circuit-switched and GPRS services. MBMS is also added.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.008V3200-2006	3.20.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.008	3.20.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 008	3.20.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v3k0
TTA	TTAT.3G-24.008(R99-3.20.0)	3.20.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R99-3.20.0)
TTC	TS-3GA-24.008(R99)v3.20.0	3.20.0	Published	Feb 06	http://www.ttc.or.jp/imt/ts/ts24008r99v3k0.pdf
Release 4					
ATIS	ATIS.3GPP.24.008V4170-2007	4.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.008	4.17.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 008	4.17.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v4h0
TTA	TTAT.3G-24.008(R4-4.17.0)	4.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R4-4.17.0)
TTC	TS-3GA-24.008(Rel4)v4.17.0	4.17.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24008rel4v4h0.pdf
Release 5					
ATIS	ATIS.3GPP.24.008V5160-2007	5.16.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.008	5.16.0	Published	Aug 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 008	5.16.0	Published	Aug 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v5g0
TTA	TTAT.3G-24.008(R5-5.16.0)	5.16.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R5-5.16.0)
TTC	TS-3GA-24.008(Rel5)v5.16.0	5.16.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts24008rel5v5g0.pdf
Release 6					
ATIS	ATIS.3GPP.24.008V6190-2008	6.19.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.008	6.19.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 008	6.19.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v6j0
TTA	TTAT.3G-24.008(R6-6.19.0)	6.19.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R6-6.19.0)
TTC	TS-3GA-24.008(Rel6)v6.19.0	6.19.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts24008rel6v6j0.pdf
Release 7					
ATIS	ATIS.3GPP.24.008V7140-2009	7.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.008	7.14.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 008	7.14.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v7e0
TTA	TTAT.3G-24.008(R7-7.14.0)	7.14.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R7-7.14.0)
TTC	TS-3GA-24.008(Rel7)v7.14.0	7.14.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24008rel7v7e0.pdf
Release 8					
ATIS	ATIS.3GPP.24.008V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.008	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 008	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v850
TTA	TTAT.3G-24.008(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R8-8.5.0)
TTC	TS-3GA-24.008(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24008rel8v850.pdf

5.1.2.11.6 TS 24.011

Point-to-point short message service (SMS) support on mobile radio interface

This specification describes the procedures used across the mobile radio interface by the signalling Layer 3 function short message control (SMC) and short message relay (SM-RL) function for both circuit-switched GSM and GPRS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.011V360-2002	3.6.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.011	3.6.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 011	3.6.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124011UR5
TTA	TTAE.3G-24.011(R99F)	3.6.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-24.011(R99F)
TTC	TS-3GA-24.011(R99)v3.6.0	3.6.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts24011r99v360.pdf
Release 4					
ATIS	T1.3GPP.24.011V411-2003	4.1.1	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.011	4.1.1	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 011	4.1.1	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124011v411
TTA	TTAT.3G-24.011(R4-4.1.1)	4.1.1	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R4-4.1.1)
TTC	TS-3GA-24.011(Rel4)v4.1.0	4.1.0	Published	May 02	http://www.ttc.or.jp/imt/ts/ts24011rel4v410.pdf
Release 5					
ATIS	T1.3GPP.24.011V520-2004	5.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.011	5.2.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 011	5.2.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124011v520
TTA	TTAT.3G-24.011(R5-5.2.0)	5.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R5-5.2.0)
TTC	TS-3GA-24.011(Rel5)v5.2.0	5.2.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts24011rel5v520.pdf
Release 6					
ATIS	ATIS.3GPP.24.011V610-2006	6.1.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.011	6.1.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 011	6.1.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124011v610
TTA	TTAT.3G-24.011(R6-6.1.0)	6.1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R6-6.1.0)
TTC	TS-3GA-24.011(Rel6)v6.1.0	6.1.0	Published	Jul 05	http://www.ttc.or.jp/imt/ts/ts24011rel6v610.pdf
Release 7					
ATIS	ATIS.3GPP.24.011V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.011	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 011	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124011v700
TTA	TTAT.3G-24.011(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R7-7.0.0)
TTC	TS-3GA-24.011(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24011rel7v700.pdf
Release 8					
ATIS	ATIS.3GPP.24.011V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.011	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 011	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124011v810
TTA	TTAT.3G-24.011(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R8-8.1.0)
TTC	TS-3GA-24.011(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24011rel8v810.pdf

5.1.2.11.7 TS 24.341**Support of SMS over IP networks; Stage 3**

This specification provides the protocol details for SMS over IP functionality within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP). The architecture for the SMS over IP functionality is specified in 3GPP TS 23.204.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.341V730-2009	7.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.341	7.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 341	7.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124341v730
TTA	TTAT.3G-24.341(R7-7.3.0)	7.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.341(R7-7.3.0)
TTC	TS-3GA-24.341(Rel7)v7.3.0	7.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24341rel7v730.pdf
Release 8					
ATIS	ATIS.3GPP.24.341V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.341	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 341	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124341v810
TTA	TTAT.3G-24.341(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.341(R8-8.1.0)
TTC	TS-3GA-24.341(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24341rel8v810.pdf

5.1.2.11.8 TS 23.060**General packet radio service (GPRS) service description – Stage 2**

This specification describes a general overview over the GPRS architecture as well as a more detailed overview of the MS – CN protocol architecture. Details of the protocols will be specified in companion documents.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.060V3170-2007	3.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.060	3.17.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 060	3.17.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v3h0
TTA	TTAT.3G-23.060(R99-3.17.0)	3.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R99-3.17.0)
TTC	TS-3GA-23.060(R99)v3.17.0	3.17.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23060r99v3h0.pdf
Release 4					
ATIS	ATIS.3GPP.23.060V4110-2007	4.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.060	4.11.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 060	4.11.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v4b0
TTA	TTAT.3G-23.060(R4-4.11.0)	4.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R4-4.11.0)
TTC	TS-3GA-23.060(Rel4)v4.11.0	4.11.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23060rel4v4b0.pdf

Release 5

ATIS	ATIS.3GPP.23.060V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.060	5.13.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 060	5.13.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v5d0
TTA	TTAT.3G-23.060(R5-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R5-5.13.0)
TTC	TS-3GA-23.060(Rel5)v5.13.0	5.13.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23060rel5v5d0.pdf

Release 6

ATIS	ATIS.3GPP.23.060V6150-2007	6.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.060	6.15.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 060	6.15.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v6f0
TTA	TTAT.3G-23.060(R6-6.15.0)	6.15.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R6-6.15.0)
TTC	TS-3GA-23.060(Rel6)v6.15.0	6.15.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23060rel6v6f0.pdf

Release 7

ATIS	ATIS.3GPP.23.060V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.060	7.8.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 060	7.8.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v780
TTA	TTAT.3G-23.060(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R7-7.8.0)
TTC	TS-3GA-23.060(Rel7)v7.8.0	7.8.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23060rel7v780.pdf

Release 8

ATIS	ATIS.3GPP.23.060V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.060	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 060	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v840
TTA	TTAT.3G-23.060(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R8-8.4.0)
TTC	TS-3GA-23.060(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23060rel8v840.pdf

Release 9

TTA	TTAT.3G-23.060(R9-9.0.0)	9.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R9-9.0.0)
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5.1.2.11.9 TS 24.022**Radio link protocol (RLP) for circuit switched bearer and teleservices**

This specification describes the RLP for data transmission over the UMTS public land mobile network (PLMN). RLP covers the Layer 2 functionality of the ISO OSI reference model (IS 7498). It is based on ideas contained in IS 3309, IS 4335 and IS 7809 (HDLC of ISO) as well as ITU-T Recommendations X.25, Q.921 and Q.922 (LAP-B and LAP-D, respectively). RLP has been tailored to the special needs of digital radio transmission. RLP provides to its users the OSI data link service (IS 8886).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.022V350-2004	3.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.022	3.5.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 022	3.5.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v350
TTA	TTAT.3G-24.022(R99-3.5.0)	3.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R99-3.5.0)
TTC	TS-3GA-24.022(R99)v3.5.0	3.5.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts24022r99v350.pdf

Release 4

ATIS	T1.3GPP.24.022V410-2004	4.1.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.022	4.1.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 022	4.1.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v410
TTA	TTAT.3G-24.022(R4-4.1.0)	4.1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R4-4.1.0)
TTC	TS-3GA-24.022(Rel4)v4.1.0	4.1.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/24022rel4v410.pdf

Release 5

ATIS	T1.3GPP.24.022V550-2004	5.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.022	5.5.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 022	5.5.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v550
TTA	TTAT.3G-24.022(R5-5.5.0)	5.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R5-5.5.0)
TTC	TS-3GA-24.022(Rel5)v5.5.0	5.5.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/24022rel5v550.pdf

Release 6

ATIS	ATIS.3GPP.24.022V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.022	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 022	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v600
TTA	TTAT.3G-24.022(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R6-6.0.0)
TTC	TS-3GA-24.022(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/24022rel6v600.pdf

Release 7

ATIS	ATIS.3GPP.24.022V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.022	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 022	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0324022v700
TTA	TTAT.3G-24.022(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R7-7.0.0)
TTC	TS-3GA-24.022(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/24022rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.24.022V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.022	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 022	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0324022v800
TTA	TTAT.3G-24.022(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R8-8.0.0)
TTC	TS-3GA-24.022(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/24022rel8v800.pdf

5.1.2.11.10 TS 24.010**Mobile radio interface Layer 3 – supplementary services specification – general aspects**

This specification describes the general aspects of the specification of supplementary services at the Layer 3 radio interface. Details are specified in other TS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.010V320-2002	3.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.010	3.2.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 010	3.2.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010UR2
TTA	TTAE.3G-24.010(R99-3.2.0)	3.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-24.010(R99-3.2.0)
TTC	TS-3GA-24.010(R99)v3.2.0	3.2.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/24010r99v320.pdf

Release 4

ATIS	T1.3GPP.24.010V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.010	4.2.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 010	4.2.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010Uv4R2
TTA	TTAE.3G-24.010(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-24.010(R4-4.2.0)
TTC	TS-3GA-24.010(Rel4)v4.2.0	4.2.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts24010rel4v420.pdf

Release 5

ATIS	T1.3GPP.24.010V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.010	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 010	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010v500
TTA	TTAT.3G-24.010(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R5-5.0.0)
TTC	TS-3GA-24.010(Rel5)v5.0.0	5.0.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts24010rel5v500.pdf

Release 6

ATIS	ATIS.3GPP.24.010V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.010	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 010	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010v600
TTA	TTAT.3G-24.010(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R6-6.0.0)
TTC	TS-3GA-24.010(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24010rel6v600.pdf

Release 7

ATIS	ATIS.3GPP.24.010V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.010	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 010	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424010v700
TTA	TTAT.3G-24.010(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R7-7.0.0)
TTC	TS-3GA-24.010(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24010rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.24.010V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.010	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 010	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424010v800
TTA	TTAT.3G-24.010(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R8-8.0.0)
TTC	TS-3GA-24.010(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24010rel8v800.pdf

5.1.2.11.11 TS 24.080**Mobile radio interface Layer 3 – supplementary services specification – formats and coding**

This specification describes the coding of information necessary for support of supplementary service operation on the mobile radio interface L3. Details are specified in other TS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.080V371-2004	3.7.1	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.080	3.7.1	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 080	3.7.1	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424080v371
TTA	TTAT.3G-24.080(R99-3.7.1)	3.7.1	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R99-3.7.1)
TTC	TS-3GA-24.080(R99)v3.7.0	3.7.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts24080r99v370.pdf

Release 4

ATIS	ATIS.3GPP.24.080V440-2005	4.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.080	4.4.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 080	4.4.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424080v440
TTA	TTAT.3G-24.080(R4-4.4.0)	4.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R4-4.4.0)
TTC	TS-3GA-24.080(Rel4)v4.4.0	4.4.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24080rel4v440.pdf

Release 5

ATIS	ATIS.3GPP.24.080V550-2005	5.5.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.080	5.5.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 080	5.5.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424080v550
TTA	TTAT.3G-24.080(R5-5.5.0)	5.5.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R5-5.5.0)
TTC	TS-3GA-24.080(Rel5)v5.5.0	5.5.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24080rel5v550.pdf

Release 6

ATIS	ATIS.3GPP.24.080V630-2006	6.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.080	6.3.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 080	6.3.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424080v630
TTA	TTAT.3G-24.080(R6-6.3.0)	6.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R6-6.3.0)
TTC	TS-3GA-24.080(Rel6)v6.3.0	6.3.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts24080rel6v630.pdf

Release 7

ATIS	ATIS.3GPP.24.080V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.080	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 080	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424080v740
TTA	TTAT.3G-24.080(R7-7.4.0)	7.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R7-7.4.0)
TTC	TS-3GA-24.080(Rel7)v7.4.0	7.4.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24080rel7v740.pdf

Release 8

ATIS	ATIS.3GPP.24.080V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.080	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 080	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424080v800
TTA	TTAT.3G-24.080(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R8-8.0.0)
TTC	TS-3GA-24.080(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24080rel8v800.pdf

5.1.2.11.12 TS 24.173**IMS Multimedia telephony service and supplementary services; Stage 3**

This specification provides the protocol details for multimedia telephony communication service and associated supplementary services in the IP Multimedia (IM) Core Network (CN) subsystem based on the requirements from 3GPP TS 22.173. Multimedia telephony and supplementary services allow users to establish communications between them and enrich that by enabling supplementary services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.173V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.173	7.8.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 173	7.8.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124173v780
TTA	TTAT.3G-24.173(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.173(R7-7.8.0)
TTC	TS-3GA-24.173(Rel7)v7.8.0	7.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24173rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.24.173V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.173	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 173	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124173v840
TTA	TTAT.3G-24.173(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.173(R8-8.4.0)
TTC	TS-3GA-24.173(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24173rel8v840.pdf

5.1.2.11.13 TS 24.237**IP Multimedia Subsystem (IMS) Service Continuity; Stage 3**

This specification provides the capability of continuing ongoing communication sessions with multiple media across different access networks or across different user equipments (UEs) under the control of the same subscriber. The present document provides the protocol details for enabling IMS SC based on the Session Initiation protocol (SIP) and the Session Description Protocol (SDP) and the protocols of the 3GPP Circuit-Switched (CS) domain (e.g. CAP, MAP, ISUP, BICC and the NAS call control protocol for the CS access).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.237V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.237	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 237	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124237v810
TTA	TTAT.3G-24.237(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.237(R8-8.1.0)
TTC	TS-3GA-24.237(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24237rel8v810.pdf

5.1.2.11.14 TS 24.279**Combining Circuit Switched (CS) and IP Multimedia Subsystem (IMS) services; Stage 3**

This specification provides the technical realization for the combination of Circuit Switched calls and IM sessions when using them simultaneously between the same two users. It also describes the use of CS and IM services in combination, using the existing procedures that have been defined for CS and IMS. It includes the necessary function as adding an IM session to an ongoing CS call, adding a CS call to an ongoing IM session, supplementary services as they relate to CSICS and supporting capability exchange.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.279V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.279	7.7.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 279	7.7.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124279v770
TTA	TTAT.3G-24.279(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.279(R7-7.7.0)
TTC	TS-3GA-24.279(Rel7)v7.7.0	7.7.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts24279rel7v770.pdf
Release 8					
ATIS	ATIS.3GPP.24.279V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.279	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 279	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124279v810
TTA	TTAT.3G-24.279(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.279(R8-8.1.0)
TTC	TS-3GA-24.279(Rel8)v8.1.0	8.1.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24279rel8v810.pdf

5.1.2.11.15 TS 24.229**IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3**

This specification defines a call control protocol for use in the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP), and the associated Session Description Protocol (SDP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.24.229V5220-2009	5.22.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.229	5.22.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 229	5.22.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v5m0
TTA	TTAT.3G-24.229(R5-5.22.0)	5.22.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R5-5.22.0)
TTC	TS-3GA-24.229(Rel5)v5.22.0	5.22.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24229rel5v5m0.pdf
Release 6					
ATIS	ATIS.3GPP.24.229V6210-2009	6.21.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.229	6.21.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 229	6.21.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v6l0
TTA	TTAT.3G-24.229(R6-6.21.0)	6.21.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R6-6.21.0)
TTC	TS-3GA-24.229(Rel6)v6.21.0	6.21.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24229rel6v6l0.pdf

Release 7

ATIS	ATIS.3GPP.24.229V7150-2009	7.15.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.229	7.15.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 229	7.15.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v7f0
TTA	TTAT.3G-24.229(R7-7.15.0)	7.15.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R7-7.15.0)
TTC	TS-3GA-24.229(Rel7)v7.15.0	7.15.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24229rel7v7f0.pdf

Release 8

ATIS	ATIS.3GPP.24.229V870-2009	8.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.229	8.7.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 229	8.7.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v870
TTA	TTAT.3G-24.229(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R8-8.7.0)
TTC	TS-3GA-24.229(Rel8)v8.7.0	8.7.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24229rel8v870.pdf

5.1.2.11.16 TS 24.141**Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3**

This specification provides the protocol details for the presence service within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and SIP Events as defined in 3GPP TS 24.229.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.141V6110-2009	6.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.141	6.11.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 141	6.11.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124141v6b0
TTA	TTAT.3G-24.141(R6-6.11.0)	6.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.141(R6-6.11.0)
TTC	TS-3GA-24.141(Rel6)v6.11.0	6.11.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24141rel6v6b0.pdf
Release 7					
ATIS	ATIS.3GPP.24.141V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.141	7.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 141	7.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124141v760
TTA	TTAT.3G-24.141(R7-7.6.0)	7.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.141(R7-7.6.0)
TTC	TS-3GA-24.141(Rel7)v7.6.0	7.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24141rel7v760.pdf
Release 8					
ATIS	ATIS.3GPP.24.141V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.141	8.3.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 141	8.3.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124141v830
TTA	TTAT.3G-24.141(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.141(R8-8.3.0)
TTC	TS-3GA-24.141(Rel8)v8.3.0	8.3.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24141rel8v830.pdf

5.1.2.11.17 TS 24.147**Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3**

This specification provides the protocol details for conferencing within the IP Multimedia Core Network subsystem (IMS) based on the Session Initiation Protocol (SIP), SIP Events, the Session Description Protocol (SDP) and the Binary Floor Control Protocol (BFCP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.147V690-2008	6.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.147	6.9.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 147	6.9.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124147v690
TTA	TTAT.3G-24.147(R6-6.9.0)	6.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.147(R6-6.9.0)
TTC	TS-3GA-24.147(Rel6)v6.9.0	6.9.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/24147rel6v690.pdf
Release 7					
ATIS	ATIS.3GPP.24.147V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.147	7.10.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 147	7.10.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124147v7a0
TTA	TTAT.3G-24.147(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.147(R7-7.10.0)
TTC	TS-3GA-24.147(Rel7)v7.10.0	7.10.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/24147rel7v7a0.pdf
Release 8					
ATIS	ATIS.3GPP.24.147V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.147	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 147	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124147v820
TTA	TTAT.3G-24.147(R7-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.147(R7-8.2.0)
TTC	TS-3GA-24.147(Rel8)v8.2.0	8.2.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/24147rel8v820.pdf

5.1.2.11.18 TS 24.247**Messaging service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3**

This specification provides the protocol details for the messaging service within the IP Multimedia CN Subsystem (IMS) based on the Session Initiation Protocol (SIP), the Session Description Protocol (SDP) and, the Message Session Relay Protocol (MSRP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.247V6100-2009	6.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.247	6.10.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 247	6.10.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124247v6a0
TTA	TTAT.3G-24.247(R6-6.10.0)	6.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.247(R6-6.10.0)
TTC	TS-3GA-24.247(Rel6)v6.10.0	6.10.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/24247rel6v6a0.pdf

Release 7

ATIS	ATIS.3GPP.24.247V740-2009	7.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.247	7.4.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 247	7.4.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124247v740
TTA	TTAT.3G-24.247(R7-7.4.0)	7.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.247(R7-7.4.0)
TTC	TS-3GA-24.247(Rel7)v7.4.0	7.4.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24247rel7v740.pdf

Release 8

ATIS	ATIS.3GPP.24.247V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.247	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 247	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124247v820
TTA	TTAT.3G-24.247(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.247(R8-8.2.0)
TTC	TS-3GA-24.247(Rel8)v8.2.0	8.2.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24247rel8v820.pdf

5.1.2.11.19 TS 29.228**IP Multimedia (IM) Subsystem Cx and Dx interfaces; Signalling flows and message contents**

This 3GPP Technical Specification (TS) specifies the interactions between the HSS (Home Subscriber Server) and the CSCF (Call Session Control Functions), referred to as the Cx interface, and the interactions between the CSCF and the SLF (Server Locator Function), referred to as the Dx interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.228V5200-2007	5.20.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.228	5.20.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 228	5.20.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v5k0
TTC	TS-3GA-29.228(Rel5)v5.20.0	5.20.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29228rel5v5k0.pdf
Release 6					
ATIS	ATIS.3GPP.29.228V6150-2007	6.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.228	6.15.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 228	6.15.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v6f0
TTC	TS-3GA-29.228(Rel6)v6.15.0	6.15.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29228rel6v6f0.pdf
Release 7					
ATIS	ATIS.3GPP.29.228V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.228	7.11.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 228	7.11.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v7b0
TTC	TS-3GA-29.228(Rel7)v7.11.0	7.11.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29228rel7v7b0.pdf
Release 8					
ATIS	ATIS.3GPP.29.228V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.228	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 228	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v850
TTC	TS-3GA-29.228(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29228rel8v850.pdf

5.1.2.11.20 TS 29.229**Cx and Dx interfaces based on the Diameter protocol; Protocol details**

This specification defines a transport protocol for use in the IP multimedia (IM) Core Network (CN) subsystem based on Diameter.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.229V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.229	5.13.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 229	5.13.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v5d0
TTA	TTAT.3G-29.229(R5-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R5-5.13.0)
TTC	TS-3GA-29.229(Rel5)v5.13.0	5.13.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29229rel5v5d0.pdf
Release 6					
ATIS	ATIS.3GPP.29.229V6100-2007	6.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.229	6.10.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 229	6.10.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v6a0
TTA	TTAT.3G-29.229(R6-6.10.0)	6.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R6-6.10.0)
TTC	TS-3GA-29.229(Rel6)v6.10.0	6.10.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29229rel6v6a0.pdf
Release 7					
ATIS	ATIS.3GPP.29.229V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.229	7.8.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 229	7.8.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v780
TTA	TTAT.3G-29.229(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R7-7.8.0)
TTC	TS-3GA-29.229(Rel7)v7.8.0	7.8.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts29229rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.29.229V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.229	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 229	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v850
TTA	TTAT.3G-29.229(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R8-8.7.0)
TTC	TS-3GA-29.229(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29229rel8v850.pdf

5.1.2.12 Terminal aspects

5.1.2.12.1 TS 21.111

USIM and IC card requirements

This specification describes the requirements of the USIM and the USIM IC card (UICC). These are derived from the service and security requirements defined in the respective specifications. The document is the basis for the detailed specification of the USIM and the UICC, and the interface to the terminal.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-21.111	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A21111-350.pdf
ATIS	ATIS.3GPP.21.111V350-2006	3.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.111	3.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 111	3.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v350
TTA	TTAT.3G-21.111(R99-3.5.0)	3.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-21.111	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A21111-420.pdf
ATIS	ATIS.3GPP.21.111V420-2006	4.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.111	4.2.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 111	4.2.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v420
TTA	TTAT.3G-21.111(R4-4.2.0)	4.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-21.111	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A21111-520.pdf
ATIS	ATIS.3GPP.21.111V520-2006	5.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.111	5.2.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 111	5.2.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v520
TTA	TTAT.3G-21.111(R5-5.2.0)	5.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R5-5.2.0)
Release 6					
ARIB	ARIB STD-T63-21.111	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A21111-630.pdf
ATIS	ATIS.3GPP.21.111V630-2007	6.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.111	6.3.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 111	6.3.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v630
TTA	TTAT.3G-21.111(R6-6.3.0)	6.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R6-6.3.0)
Release 7					
ARIB	ARIB STD-T63-21.111	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A21111-710.pdf
ATIS	ATIS.3GPP.21.111V710-2008	7.1.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.111	7.1.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 111	7.1.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v710
TTA	TTAT.3G-21.111(R7-7.1.0)	7.1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R7-7.1.0)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-21.111	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A21111-710.pdf
ATIS	ATIS.3GPP.21.111V820-2008	8.2.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.111	8.2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 111	8.2.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v820
TTA	TTAT.3G-21.111(R8-8.2.0)	8.2.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R8-8.2.0)

5.1.2.12.2 TS 22.112**USAT-Interpreter – Stage 1**

This specification specifies a system to make Mobile Operator services, based on USAT functionality and USIM based security functionality, available to an internet environment. This is achieved by specifying the necessary components and protocols for a secure narrow-band channel between the internet application and an USAT Interpreter on the USIM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-22.112	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A21111-820.pdf
ATIS	T1.3GPP.22.112V500-2004	5.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-22.112	5.0.0	Published	Aug 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 112	5.0.0	Published	Aug 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0322112v500
TTA	TTAT.3G-22.112(R5-5.0.0)	5.0.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-22.112	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22112-600.pdf
ATIS	ATIS.3GPP.22.112V600-2006	6.0.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-22.112	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 112	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0322112v600
TTA	TTAT.3G-22.112(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-22.112	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22112-700.pdf
ATIS	ATIS.3GPP.22.112V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-22.112	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 112	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0622112v700
TTA	TTAT.3G-22.112(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-22.112	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22112-800.pdf
ATIS	ATIS.3GPP.22.112V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-22.112	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 112	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0622112v800
TTA	TTAT.3G-22.112(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R8-8.0.0)

5.1.2.12.3 TS 31.101

UICC-Terminal Interface; Physical and Logical Characteristics

This specification specifies the interface between the UICC and the Terminal for 3G telecom network operation. This includes the requirements for the physical characteristics of the UICC, the electrical interface between the UICC and the Terminal, the initial communication establishment and the transport protocols, the communication commands and the procedures and the application independent files and protocols.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.101	3.3.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31101-331.pdf
ATIS	ATIS.3GPP.31.101V331-2006	3.3.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.101	3.3.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 101	3.3.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331101v331
TTA	TTAE.3G-31.101(R99-3.3.1)	3.3.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-31.101(R99-3.3.1)
Release 4					
ARIB	ARIB STD-T63-31.101	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31101-421.pdf
ATIS	ATIS.3GPP.31.101V421-2006	4.2.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.101	4.2.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 101	4.2.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331101v421
TTA	TTAT.3G-31.101(R4-4.2.1)	4.2.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R4-4.2.1)
Release 5					
ARIB	ARIB STD-T63-31.101	5.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31101-521.pdf
ATIS	ATIS.3GPP.31.101V521-2006	5.2.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.101	5.2.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 101	5.2.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331101v521
TTA	TTAT.3G-31.101(R5-5.2.1)	5.2.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R5-5.2.1)
Release 6					
ARIB	ARIB STD-T63-31.101	6.5.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31101-651.pdf
ATIS	ATIS.3GPP.31.101V651-2007	6.5.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.101	6.5.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 101	6.5.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631101v651
TTA	TTAT.3G-31.101(R6-6.5.1)	6.5.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R6-6.5.1)
Release 7					
ARIB	ARIB STD-T63-31.101	7.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31101-701.pdf
ATIS	ATIS.3GPP.31.101V701-2007	7.0.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.101	7.0.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 101	7.0.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631101v701
TTA	TTAT.3G-31.101(R7-7.0.1)	7.0.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R7-7.0.1)
Release 8					
ARIB	ARIB STD-T63-31.101	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31101-800.pdf
ATIS	ATIS.3GPP.31.101V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.101	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 101	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631101v800
TTA	TTAT.3G-31.101(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R8-8.0.0)

5.1.2.12.4 TS 31.102

Characteristics of the USIM Application

This specification defines the USIM application for 3G telecom network operation. This specification specifies, command parameters, file structures and content, security functions and the application protocol to be used on the interface between UICC (USIM) and ME.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.102	3.18.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31102-3i0.pdf
ATIS	ATIS.3GPP.31.102V3180-2006	3.18.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.102	3.18.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 102	3.18.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v3i0
TTA	TTAT.3G-31.102(R99-3.18.0)	3.18.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R99-3.18.0)
Release 4					
ARIB	ARIB STD-T63-31.102	4.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31102-4f0.pdf
ATIS	ATIS.3GPP.31.102V4150-2006	4.15.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.102	4.15.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 102	4.15.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v4f0
TTA	TTAT.3G-31.102(R4-4.15.0)	4.15.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R4-4.15.0)
Release 5					
ARIB	ARIB STD-T63-31.102	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31102-5e0.pdf
ATIS	ATIS.3GPP.31.102V5140-2006	5.14.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.102	5.14.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 102	5.14.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v5e0
TTA	TTAT.3G-31.102(R5-5.14.0)	5.14.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R5-5.14.0)
Release 6					
ARIB	ARIB STD-T63-31.102	6.21.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31102-6i0.pdf
ATIS	ATIS.3GPP.31.102V6210-2009	6.21.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.102	6.21.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 102	6.21.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v6i0
TTA	TTAT.3G-31.102(R6-6.21.0)	6.21.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R6-6.21.0)
Release 7					
ARIB	ARIB STD-T63-31.102	7.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31102-7d0.pdf
ATIS	ATIS.3GPP.31.102V7130-2009	7.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.102	7.13.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 102	7.13.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v7d0
TTA	TTAT.3G-31.102(R7-7.13.0)	7.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R7-7.13.0)
Release 8					
ARIB	ARIB STD-T63-31.102	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31102-850.pdf
ATIS	ATIS.3GPP.31.102V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.102	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 102	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v850
TTA	TTAT.3G-31.102(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R8-8.5.0)

5.1.2.12.5 TS 31.103

Characteristics of the ISIM Application

This specification defines the ISIM application for 3G telecom network operation. This specification specifies, command parameters, file structures and content, security functions and the application protocol to be used on the interface between UICC (ISIM) and ME.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-31.103	5.13.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31103-5d1.pdf
ATIS	ATIS.3GPP.31.103V5131-2007	5.13.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.103	5.13.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 103	5.13.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v5d1
TTA	TTAT.3G-31.103(R5-5.13.1)	5.13.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R5-5.13.1)
Release 6					
ARIB	ARIB STD-T63-31.103	6.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31103-6d0.pdf
ATIS	ATIS.3GPP.31.103V6130-2009	6.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.103	6.13.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 103	6.13.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v6d0
TTA	TTAT.3G-31.103(R6-6.13.0)	6.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R6-6.13.0)
Release 7					
ARIB	ARIB STD-T63-31.103	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31103-740.pdf
ATIS	ATIS.3GPP.31.103V740-2009	7.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.103	7.4.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 103	7.4.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v740
TTA	TTAT.3G-31.103(R7-7.4.0)	7.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R7-7.4.0)
Release 8					
ARIB	ARIB STD-T63-31.103	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31103-800.pdf
ATIS	ATIS.3GPP.31.103V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.103	8.0.1	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 103	8.0.1	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v801
TTA	TTAT.3G-31.103(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R8-8.0.1)

5.1.2.12.6 TS 31.133**ISIM Application Programming Interface (API)**

This specification defines the ISIM Application Programming Interface extending the “UICC API for Java Card™”. This API allows to develop an application running together with a ISIM application. The present document includes information applicable to network operators, service providers, server, ISIM and database manufacturers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ARIB	ARIB STD-T63-31.133	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31133-720.pdf
CCSA	CCSA-TSD-DS-31.133	7.2.2	Published	Nov 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 133	7.2.2	Published	Nov 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631133v722
TTA	TTAT.3G-31.133(R7-7.2.2)	7.2.2	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.133(R7-7.2.2)
Release 8					
ARIB	ARIB STD-T63-31.133	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31133-800.pdf
ATIS	ATIS.3GPP.31.133V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.133	8.0.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 133	8.0.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631133v800
TTA	TTAT.3G-31.133(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.133(R8-8.0.0)

5.1.2.12.7 TS 31.110**Numbering system for telecommunication IC card applications**

This specification describes the numbering system for Application IDentifiers (AID) for 3G telecommunication Integrated Circuits (IC) card applications. The numbering system provides a means for an application and related services offered by a provider to identify if a given card contains the elements required by its application and related services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.110	3.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31110-320.pdf
ATIS	T1.3GPP.31.110V320-2002	3.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.110	3.2.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 110	3.2.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331110UR2
TTA	TTAE.3G-31.110(R99)	3.2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-31.110(R99)
Release 4					
ARIB	ARIB STD-T63-31.110	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31110-410.pdf
ATIS	T1.3GPP.31.110V410-2002	4.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.110	4.1.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 110	4.1.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331110Uv4R1
TTA	TTAE.3G-31.110(R4-4.1.0)	4.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-31.110(R4-4.1.0)

5.1.2.12.8 TS 31.111

USIM application toolkit (USAT)

This specification defines the interface between the UICC and the Mobile Equipment (ME), and mandatory ME procedures, specifically for “USIM Application Toolkit”. USAT is a set of commands and procedures for use during the network operation phase of 3G, in addition to those defined in TS 31.101.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.111	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31111-3e0.pdf
ATIS	ATIS.3GPP.31.111V3140-2007	3.14.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.111	3.14.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 111	3.14.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v3e0
TTA	TTAT.3G-31.111(R99-3.14.0)	3.14.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R99-3.14.0)
Release 4					
ARIB	ARIB STD-T63-31.111	4.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31111-4g0.pdf
ATIS	ATIS.3GPP.31.111V4160-2007	4.16.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.111	4.16.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 111	4.16.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v4g0
TTA	TTAT.3G-31.111(R4-4.16.0)	4.16.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R4-4.16.0)
Release 5					
ARIB	ARIB STD-T63-31.111	5.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31111-5b0.pdf
ATIS	ATIS.3GPP.31.111V5110-2007	5.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.111	5.11.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 111	5.11.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v5b0
TTA	TTAT.3G-31.111(R5-5.11.0)	5.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R5-5.11.0)
Release 6					
ARIB	ARIB STD-T63-31.111	6.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31111-6c0.pdf
ATIS	ATIS.3GPP.31.111V6120-2009	6.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.111	6.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 111	6.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v6c0
TTA	TTAT.3G-31.111(R6-6.12.0)	6.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R6-6.12.0)
Release 7					
ARIB	ARIB STD-T63-31.111	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31111-7a0.pdf
ATIS	ATIS.3GPP.31.111V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.111	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 111	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v7a0
TTA	TTAT.3G-31.111(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R7-7.10.0)
Release 8					
ARIB	ARIB STD-T63-31.111	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31111-850.pdf
ATIS	ATIS.3GPP.31.111V851-2009	8.5.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.111	8.5.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 111	8.5.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v851
TTA	TTAT.3G-31.111(R8-8.5.1)	8.5.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R8-8.5.1)

5.1.2.12.9 TS 31.112**USIM Application Toolkit (USAT) interpreter architecture**

This specification defines the overall architecture for the USAT Interpreter system including the role models, system architecture and information flow.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-31.112	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31112-520.pdf
ATIS	T1.3GPP.31.112V520-2003	5.2.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.112	5.2.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 112	5.2.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331112v520
TTA	TTAT.3G-31.112(R5-5.2.0)	5.2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R5-5.2.0)
Release 6					
ARIB	ARIB STD-T63-31.112	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31112-600.pdf
ATIS	ATIS.3GPP.31.112V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.112	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 112	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331112v600
TTA	TTAT.3G-31.112(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-31.112	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31112-700.pdf
ATIS	ATIS.3GPP.31.112V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.112	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 112	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631112v700
TTA	TTAT.3G-31.112(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.112	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31112-800.pdf
ATIS	ATIS.3GPP.31.112V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.112	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 112	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631112v800
TTA	TTAT.3G-31.112(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R8-8.0.0)

5.1.2.12.10 TS 31.113**USAT Interpreter Byte Codes**

This specification specifies the byte codes that are recognized by an USAT Interpreter. The primary purpose of the byte codes is to provide efficient programmatic access to the SIM Application Toolkit commands.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-31.113	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31113-560.pdf
ATIS	ATIS.3GPP.31.113V560-2005	5.6.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.113	5.6.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 113	5.6.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331113v560
TTA	TTAT.3G-31.113(R5-5.6.0)	5.6.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-31.113	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31113-630.pdf
ATIS	ATIS.3GPP.31.113V630-2005	6.3.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.113	6.3.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 113	6.3.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331113v630
TTA	TTAT.3G-31.113(R6-6.3.0)	6.3.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R6-6.3.0)

Release 7

ARIB	ARIB STD-T63-31.113	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31113-700.pdf
ATIS	ATIS.3GPP.31.113V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.113	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 113	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631113v700
TTA	TTAT.3G-31.113(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-31.113	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31113-800.pdf
ATIS	ATIS.3GPP.31.113V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.113	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 113	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631113v800
TTA	TTAT.3G-31.113(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R8-8.0.0)

5.1.2.12.11 TS31.220**Contact Manager for 3GPP UICC applications – external interface aspects**

This specification defines the Contact Manager for 3GPP UICC applications based on OMA DS, also specifies the external interface between the Contact Manager Server in the UICC and the Contact Manager External Client in the ME.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-31.220	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31220-800.pdf
ATIS	ATIS.3GPP.31.220V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
ATIS	ATIS.3GPP.31.220V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.220	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 220	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGC-0631220v800
TTA	TTAT.3G-31.220(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.220(R8-8.0.0)

5.1.2.12.12 TS 31.120**Physical, Electrical and Logical Test Specification**

This specification tests the physical, electrical and logical requirements as specified in TS 31.101.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.120	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31120-310.pdf
ATIS	ATIS.3GPP.31.120V310-2005	3.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.120	3.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 120	3.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v310
TTA	TTAT.3G-31.120(R99-3.1.0)	3.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-31.120	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31120-400.pdf
ATIS	ATIS.3GPP.31.120V400-2006	4.0.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.120	4.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 120	4.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v400
TTA	TTAT.3G-31.120(R4-4.0.0)	4.0.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-31.120	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31120-500.pdf
ATIS	ATIS.3GPP.31.120V500-2006	5.0.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.120	5.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 120	5.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v500
TTA	TTAT.3G-31.120(R5-5.0.0)	5.0.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-31.120	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31120-600.pdf
ATIS	ATIS.3GPP.31.120V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.120	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 120	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v600
TTA	TTAT.3G-31.120(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-31.120	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31120-700.pdf
ATIS	ATIS.3GPP.31.120V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.120	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 120	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631120v700
TTA	TTAT.3G-31.120(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.120	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31120-800.pdf
ATIS	ATIS.3GPP.31.120V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.120	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 120	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631120v800
TTA	TTAT.3G-31.120(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R8-8.0.0)

5.1.2.12.13 TS 31.121

UICC-Terminal Interface; USIM Application Test specification

This specification provides the UICC-Terminal Interface Conformance Test Specification between the 3G Terminal and USIM (Universal Subscriber Identity Module) as an application on the UICC and the Terminal for 3G telecom network operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.121	3.15.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31121-3f1.pdf
ATIS	ATIS.3GPP.31.121V3151-2006	3.15.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.121	3.15.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 121	3.15.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v3f1
TTA	TTAT.3G-31.121(R99-3.15.1)	3.15.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R99-3.15.1)
Release 4					
ARIB	ARIB STD-T63-31.121	4.14.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31121-4e1.pdf
ATIS	ATIS.3GPP.31.121V4141-2006	4.14.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.121	4.14.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 121	4.14.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v4e1
TTA	TTAT.3G-31.121(R4-4.14.1)	4.14.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R4-4.14.1)
Release 5					
ARIB	ARIB STD-T63-31.121	5.4.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31121-541.pdf
ATIS	ATIS.3GPP.31.121V541-2006	5.4.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.121	5.4.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 121	5.4.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v541
TTA	TTAT.3G-31.121(R5-5.4.1)	5.4.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R5-5.4.1)
Release 6					
ARIB	ARIB STD-T63-31.121	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31121-680.pdf
ATIS	ATIS.3GPP.31.121V680-2007	6.8.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.121	6.8.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 121	6.8.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v680
TTA	TTAT.3G-31.121(R6-6.8.0)	6.8.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R6-6.8.0)
Release 7					
ARIB	ARIB STD-T63-31.121	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31121-750.pdf
ATIS	ATIS.3GPP.31.121V750-2009	7.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.121	7.5.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 121	7.5.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v750
TTA	TTAT.3G-31.121(R7-7.5.0)	7.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R7-7.5.0)
Release 8					
ARIB	ARIB STD-T63-31.121	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31121-800.pdf
ATIS	ATIS.3GPP.31.121V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.121	8.0.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 121	8.0.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v800
TTA	TTAT.3G-31.121(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R8-8.0.0)

5.1.2.12.14 TS 31.122

USIM Conformance Test Specification

This specification provides the Conformance Test Specification for a UICC defined in TS 31.101 with Universal Subscriber Identity Module (USIM) defined in 3G TS 31.102.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.122	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31122-3a0.pdf
ATIS	ATIS.3GPP.31.122V3100-2007	3.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.122	3.10.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 122	3.10.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v3a0
TTA	TTAT.3G-31.122(R99-3.10.0)	3.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-31.122	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31122-421.pdf
ATIS	ATIS.3GPP.31.122V421-2007	4.2.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.122	4.2.1	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 122	4.2.1	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v421
TTA	TTAT.3G-31.122(R4-4.2.1)	4.2.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R4-4.2.1)
Release 5					
ARIB	ARIB STD-T63-31.122	5.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31122-501.pdf
ATIS	ATIS.3GPP.31.122V501-2007	5.0.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.122	5.0.1	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 122	5.0.1	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v501
TTA	TTAT.3G-31.122(R5-5.0.1)	5.0.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R5-5.0.1)
Release 6					
ARIB	ARIB STD-T63-31.122	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31122-650.pdf
ATIS	ATIS.3GPP.31.122V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.122	6.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 122	6.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v650
TTA	TTAT.3G-31.122(R6-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R6-6.5.0)
Release 7					
ARIB	ARIB STD-T63-31.122	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31122-710.pdf
ATIS	ATIS.3GPP.31.122V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.122	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 122	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v710
TTA	TTAT.3G-31.122(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-31.122	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31122-800.pdf
ATIS	ATIS.3GPP.31.122V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.122	8.0.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 122	8.0.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v801
TTA	TTAT.3G-31.122(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R8-8.0.1)

5.1.2.12.15 TS 31.130

(U)SIM API for Java Card

This specification defines the (U)SIM Application Programming Interface extending the “UICC API for Java Card™”. This API allows to develop a (U)SAT application running together with a (U)SIM application and using GSM/3G network features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-31.130	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31130-660.pdf
ATIS	ATIS.3GPP.31.130V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.130	6.6.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 130	6.6.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631130v660
TTA	TTAT.3G-31.130(R6-6.6.0)	6.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.130(R6-6.6.0)
Release 7					
ARIB	ARIB STD-T63-31.130	7.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31130-770.pdf
ATIS	ATIS.3GPP.31.130V771-2008	7.7.1	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.130	7.7.1	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 130	7.7.1	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631130v771
TTA	TTAT.3G-31.130(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.130(R7-7.7.0)
Release 8					
ARIB	ARIB STD-T63-31.130	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31130-810.pdf
ATIS	ATIS.3GPP.31.130V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.130	8.1.0	Awaiting publication		http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 130	8.1.0	Published	Jul 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631130v810

5.1.2.12.16 TS 31.115

Secured packet structure for (U)SIM Toolkit applications

This specification specifies the structure of the Secured Packets in implementations using Short Message Service and Cell Broadcast Service. It is applicable to the exchange of secured packets between an entity in a 3G or GSM PLMN and an entity in the (U)SIM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-31.115	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31115-650.pdf
ATIS	ATIS.3GPP.31.115V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.115	6.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 115	6.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631115v650
TTA	TTAT.3G-31.115(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.115(R6-6.5.0)

Release 7

ARIB	ARIB STD-T63-31.115	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31115-710.pdf
ATIS	ATIS.3GPP.31.115V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.115	7.1.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 115	7.1.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631115v710
TTA	TTAT.3G-31.115(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.115(R7-7.1.0)

Release 8

ARIB	ARIB STD-T63-31.115	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31115-800.pdf
ATIS	ATIS.3GPP.31.115V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.115	8.0.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 115	8.0.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631115v801
TTA	TTAT.3G-31.115(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.115(R8-8.0.1)

5.1.2.12.17 TS 31.116**APDU Structure for (U)SIM Toolkit applications**

This specification defines the remote management of files and applets on the SIM/USIM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-31.116	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31116-680.pdf
ATIS	ATIS.3GPP.31.116V680-2006	6.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.116	6.8.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 116	6.8.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631116v680
TTA	TTAT.3G-31.116(R6-6.8.0)	6.8.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.116(R6-6.8.0)
Release 7					
ARIB	ARIB STD-T63-31.116	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R/Rel7/A31116-700.pdf
ATIS	ATIS.3GPP.31.116V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.116	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 116	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631116v700
TTA	TTAT.3G-31.116(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.116(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.116	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R/Rel7/A31116-700.pdf
ATIS	ATIS.3GPP.31.116V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.116	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 116	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631116v800
TTA	TTAT.3G-31.116(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.116(R8-8.0.0)

5.1.2.12.18 TS 31.131

'C' Language Binding to USIM API

This specification includes information applicable to (U)SIM toolkit application developers creating applications using the C programming language ISO/IEC 9899. This specification describes an interface between toolkit applications written in the C programming language and the (U)SIM in order to realize the cooperation set forth in TS 42.019. In particular, the API described herein provides the service of assembling proactive commands and disassembling the responses to these commands for the application programmer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-31.131	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31131-610.pdf
ATIS	T1.3GPP.31.131V610-2004	6.1.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.131	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 131	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0331131v610
TTA	TTAT.3G-31.131(R6-6.1.0)	6.1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.131(R6-6.1.0)
Release 7					
ARIB	ARIB STD-T63-31.131	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31131-700.pdf
ATIS	ATIS.3GPP.31.131V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.131	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 131	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631131v700
TTA	TTAT.3G-31.131(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.131(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.131	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31131-800.pdf
ATIS	ATIS.3GPP.31.131V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-31.131	8.0.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 131 131	8.0.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631131v800
TTA	TTAT.3G-31.131(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.131(R8-8.0.0)

5.1.2.12.19 TS 34.131

Test Specification for 'C'-language binding to (U)SIM API

This specification covers the minimum characteristics considered necessary in order to provide compliance to 3GPP TS 31.131 "'C'-language binding to (U)SIM API".

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Release 6					
ARIB	ARIB STD-T63-34.131	6.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34131-601.pdf
ATIS	ATIS.3GPP.34.131V601-2006	6.0.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.131	6.0.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 131	6.0.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0334131v601
TTA	TTAT.3G-34.131(R6-6.0.1)	6.0.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.131(R6-6.0.1)

Release 7

ARIB	ARIB STD-T63-34.131	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34131-700.pdf
ATIS	ATIS.3GPP.34.131V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.131	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 131	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0634131v700
TTA	TTAT.3G-34.131(R7-7.0.0)	7.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.131(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-34.131	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34131-800.pdf
ATIS	ATIS.3GPP.34.131V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-34.131	8.0.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 134 131	8.0.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0634131v801
TTA	TTAT.3G-34.131(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.131(R8-8.0.1)

5.1.2.12.20 TS 22.048**Security mechanisms for (U)SIM application toolkit – Stage 1**

This specification provides standardized security mechanisms in conjunction with the SIM Application Toolkit for the interface between a 3G or GSM PLMN Entity and a UICC at the functional level.

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Release 4					
ARIB	ARIB STD-T63-22.048	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22048-400.pdf
ATIS	T1.3GPP.22.048V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-22.048	4.0.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 048	4.0.0	Published	Jul 01	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0322048Uv4
TTA	TTAE.3G-22.048(R4)	4.0.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-22.048(R4)
Release 5					
ATIS	T1.3GPP.22.048V500-2004	5.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-22.048	5.0.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 048	5.0.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0322048v500
TTA	TTAT.3G-22.048(R5-5.0.0)	5.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.048(R5-5.0.0)

5.1.2.12.21 TS 23.048

Security mechanisms for (U)SIM application toolkit – Stage 2

This specification specifies the structure of the Secured Packets in a general format and in implementations using Short Message Service Point to Point (SMS-PP) and Short Message Service Cell Broadcast (SMS-CB).

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Release 4					
ARIB	ARIB STD-T63-23.048	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23048-450.pdf
ATIS	ATIS.3GPP.23.048V450-2006	4.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.048	4.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 048	4.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0623048v450
TTA	TTAT.3G-23.048(R4-4.5.0)	4.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.048(R4-4.5.0)
Release 5					
ARIB	ARIB STD-T63-23.048	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23048-590.pdf
ATIS	ATIS.3GPP.23.048V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.048	5.9.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 048	5.9.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0623048v590
TTA	TTAT.3G-23.048(R5-5.9.0)	5.9.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.048(R5-5.9.0)

5.1.2.12.22 TS 23.038

Alphabets and language specific information

This specification describes the language specific requirements for the terminals including character coding.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.038	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23038-330.pdf
ATIS	T1.3GPP.23.038V330-2002	3.3.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.038	3.3.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 038	3.3.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0223038U
TTA	TTAE.3G-23.038(R99)	3.3.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.038(R99)
Release 4					
ARIB	ARIB STD-T63-23.038	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23038-450.pdf
ATIS	ATIS.3GPP.23.038V450-2005	4.5.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.038	4.5.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 038	4.5.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223038v450
TTA	TTAT.3G-23.038(R4-4.5.0)	4.5.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R4-4.5.0)

Release 5

ARIB	ARIB STD-T63-23.038	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23038-510.pdf
ATIS	ATIS.3GPP.23.038V510-2005	5.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.038	5.1.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 038	5.1.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223038v510
TTA	TTAT.3G-23.038(R5-5.1.0)	5.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R5-5.1.0)

Release 6

ARIB	ARIB STD-T63-23.038	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23038-610.pdf
ATIS	ATIS.3GPP.23.038V610-2005	6.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.038	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 038	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223038v610
TTA	TTAT.3G-23.038(R6-6.1.0)	6.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R6-6.1.0)

Release 7

ARIB	ARIB STD-T63-23.038	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23038-700.pdf
ATIS	ATIS.3GPP.23.038V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.038	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 038	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123038v700
TTA	TTAT.3G-23.038(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.038	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23038-820.pdf
ATIS	ATIS.3GPP.23.038V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.038	8.2.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 038	8.2.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123038v820
TTA	TTAT.3G-23.038(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R8-8.2.0)

5.1.2.12.23 TS 23.040**Technical realization of SMS point-to-point**

This specification describes the point-to-point SMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.040	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23040-3b0.pdf
ATIS	ATIS.3GPP.23.040V3110-2008	3.11.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.040	3.11.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 040	3.11.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v3b0
TTA	TTAT.3G-23.040(R99-3.11.0)	3.11.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-23.040	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23040-4a0.pdf
ATIS	ATIS.3GPP.23.040V4100-2008	4.10.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.040	4.10.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 040	4.10.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v4a0
TTA	TTAT.3G-23.040(R4-4.10.0)	4.10.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R4-4.10.0)

Release 5

ARIB	ARIB STD-T63-23.040	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23040-590.pdf
ATIS	ATIS.3GPP.23.040V590-2008	5.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.040	5.9.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 040	5.9.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v590
TTA	TTAT.3G-23.040(R5-5.9.0)	5.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-23.040	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23040-690.pdf
ATIS	ATIS.3GPP.23.040V690-2008	6.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.040	6.9.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 040	6.9.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v690
TTA	TTAT.3G-23.040(R6-6.9.0)	6.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-23.040	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23040-720.pdf
ATIS	ATIS.3GPP.23.040V720-2009	7.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.040	7.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 040	7.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v720
TTA	TTAT.3G-23.040(R7-7.2.0)	7.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R7-7.2.0)

Release 8

ARIB	ARIB STD-T63-23.040	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23040-840.pdf
ATIS	ATIS.3GPP.23.040V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.040	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 040	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v840
TTA	TTAT.3G-23.040(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R8-8.4.0)

5.1.2.12.24 TS 23.041**Technical realization of cell broadcast service (CBS)**

This specification describes the point-to-multipoint CBS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.041	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23041-350.pdf
ATIS	T1.3GPP.23.041V350-2003	3.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.041	3.5.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 041	3.5.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v350
TTA	TTAT.3G-23.041(R99-3.5.0)	3.5.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-23.041	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23041-440.pdf
ATIS	T1.3GPP.23.041V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.041	4.4.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 041	4.4.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v440
TTA	TTAT.3G-23.041(R4-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R4-4.4.0)

Release 5

ARIB	ARIB STD-T63-23.041	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23041-520.pdf
ATIS	T1.3GPP.23.041V520-2004	5.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.041	5.2.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 041	5.2.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v520
TTA	TTAT.3G-23.041(R5-5.2.0)	5.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R5-5.2.0)

Release 6

ARIB	ARIB STD-T63-23.041	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23041-620.pdf
ATIS	T1.3GPP.23.041V620-2004	6.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.041	6.2.0	Published	May 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 041	6.2.0	Published	May 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v620
TTA	TTAT.3G-23.041(R6-6.2.0)	6.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-23.041	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23041-700.pdf
ATIS	ATIS.3GPP.23.041V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.041	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 041	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123041v700
TTA	TTAT.3G-23.041(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.041	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23041-820.pdf
ATIS	ATIS.3GPP.23.041V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.041	8.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 041	8.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123041v820
TTA	TTAT.3G-23.041(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R8-8.2.0)

5.1.2.12.25 TS 23.042**Compression algorithm for text messaging services**

This specification describes the compression algorithm for text messaging services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.042	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23042-310.pdf
ATIS	T1.3GPP.23.042V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.042	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 042	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0223042U
TTA	TTAE.3G-23.042(F)	3.1.0	Approved	Mar 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.042(F)
Release 4					
ARIB	ARIB STD-T63-23.042	4.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23042-401.zip
ATIS	T1.3GPP.23.042V401-2002	4.0.1	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.042	4.0.1	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 042	4.0.1	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223042Uv4R1
TTA	TTAE.3G-23.042(R4-4.0.1)	4.0.1	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.042(R4-4.0.1)

Release 5

ARIB	ARIB STD-T63-23.042	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23042-500.pdf
ATIS	T1.3GPP.23.042V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.042	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 042	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223042v500
TTA	TTAT.3G-23.042(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-23.042	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23042-600.pdf
ATIS	ATIS.3GPP.23.042V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.042	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 042	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223042v600
TTA	TTAT.3G-23.042(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-23.042	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23042-700.pdf
ATIS	ATIS.3GPP.23.042V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.042	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 042	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123042v700
TTA	TTAT.3G-23.042(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.042	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23042-800.pdf
ATIS	ATIS.3GPP.23.042V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.042	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 042	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123042v800
TTA	TTAT.3G-23.042(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R8-8.0.0)

5.1.2.12.26 TS 23.057**Mobile Execution Environment (MExE) – Stage 2**

This TS describes the functional capabilities and the security architecture of the Mobile Execution Environment.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.057	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23057-340.pdf
ATIS	T1.3GPP.23.057V340-2002	3.4.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.057	3.4.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 057	3.4.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057UR4
TTA	TTAE.3G-23.057(R99)	3.4.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.057(R99)
Release 4					
ARIB	ARIB STD-T63-23.057	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23057-450.pdf
ATIS	T1.3GPP.23.057V450-2002	4.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.057	4.5.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 057	4.5.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057Uv4R4
TTA	TTAE.3G-23.057(R4-4.5.0)	4.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.057(R4-4.5.0)

Release 5

ARIB	ARIB STD-T63-23.057	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23057-510.pdf
ATIS	T1.3GPP.23.057V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.057	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 057	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057v510
TTA	TTAT.3G-23.057(R5-5.1.0)	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R5-5.1.0)

Release 6

ARIB	ARIB STD-T63-23.057	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23057-620.pdf
ATIS	T1.3GPP.23.057V620-2004	6.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.057	6.2.0	Published	May 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 057	6.2.0	Published	May 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057v620
TTA	TTAT.3G-23.057(R6-6.2.0)	6.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-23.057	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23057-700.pdf
ATIS	ATIS.3GPP.23.057V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.057	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 057	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223057v700
TTA	TTAT.3G-23.057(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.057	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23057-800.pdf
ATIS	ATIS.3GPP.23.057V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.057	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 057	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223057v800
TTA	TTAT.3G-23.057(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R8-8.0.0)

5.1.2.12.27 TS 27.005**Use of data terminal equipment – data circuit terminating equipment (DTE – DCE) interface for cell broadcast service (CBS)**

This specification describes three interface protocols for control of SMS functions within a GSM mobile telephone from a remote terminal via an asynchronous interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.005	3.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27005-320.pdf
ATIS	T1.3GPP.27.005V320-2003	3.2.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.005	3.2.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 005	3.2.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v320
TTA	TTAT.3G-27.005(R99-3.2.0)	3.2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R99-3.2.0)
Release 4					
ARIB	ARIB STD-T63-27.005	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27005-421.pdf
ATIS	ATIS.3GPP.27.005V421-2006	4.2.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.005	4.2.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 005	4.2.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v421
TTA	TTAT.3G-27.005(R4-4.2.1)	4.2.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R4-4.2.1)

Release 5

ARIB	ARIB STD-T63-27.005	5.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27005-501.pdf
ATIS	ATIS.3GPP.27.005V501-2006	5.0.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.005	5.0.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 005	5.0.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v501
TTA	TTAT.3G-27.005(R5-5.0.1)	5.0.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R5-5.0.1)

Release 6

ARIB	ARIB STD-T63-27.005	6.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A27005-601.pdf
ATIS	ATIS.3GPP.27.005V601-2006	6.0.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.005	6.0.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 005	6.0.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v601
TTA	TTAT.3G-27.005(R6-6.0.1)	6.9.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R6-6.0.1)

Release 7

ARIB	ARIB STD-T63-27.005	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A27005-700.pdf
ATIS	ATIS.3GPP.27.005V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.005	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 005	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127005v700
TTA	TTAT.3G-27.005(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-27.005	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A27005-800.pdf
ATIS	ATIS.3GPP.27.005V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.005	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 005	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127005v800
TTA	TTAT.3G-27.005(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R8-8.0.0)

5.1.2.12.28 TS 27.007**AT command set for the user equipment (UE)**

This specification describes a profile of AT commands and recommends that this profile be used for controlling mobile equipment (ME) functions and GSM network services from a terminal equipment (TE) through terminal adaptor (TA).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.007	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27007-3d0.pdf
ATIS	T1.3GPP.27.007V3130-2004	3.13.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.007	3.13.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 007	3.13.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227007v3d0
TTA	TTAT.3G-27.007(R99-3.13.0)	3.13.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.007(R99-3.13.0)
Release 4					
ARIB	ARIB STD-T63-27.007	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27007-460.pdf
ATIS	T1.3GPP.27.007V460-2004	4.6.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.007	4.6.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 007	4.6.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227007v460
TTA	TTAT.3G-27.007(R4-4.6.0)	4.6.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.007(R4-4.6.0)

Release 5

ARIB	ARIB STD-T63-27.007	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27007-560.pdf
ATIS	ATIS.3GPP.27.007V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.007	5.6.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 007	5.6.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v560
TTA	TTAT.3G-24.007(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-27.007	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A27007-690.pdf
ATIS	ATIS.3GPP.27.007V690-2007	6.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.007	6.9.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 007	6.9.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v690
TTA	TTAT.3G-24.007(R6-6.9.0)	6.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-27.007	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A27007-750.pdf
ATIS	ATIS.3GPP.27.007V750-2009	7.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.007	7.5.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 007	7.5.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v750
TTA	TTAT.3G-24.007(R7-7.5.0)	7.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-27.007	8.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A27007-870.pdf
ATIS	ATIS.3GPP.27.007V870-2009	8.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.007	8.7.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 007	8.7.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v870
TTA	TTAT.3G-24.007(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R8-8.7.0)

5.1.2.12.29 TS 27.010**Terminal equipment to mobile station (TE-MS) multiplexer protocol**

This specification describes a multiplexing protocol between a mobile station and an external data terminal for the purposes of enabling multiple channels to be established for different purposes (e.g. simultaneous SMS and data call).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.010	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27010-340.pdf
ATIS	T1.3GPP.27.010V340-2002	3.4.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.010	3.4.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 010	3.4.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010UR2
TTA	TTAE.3G-27.010(R99-3.4.0)	3.4.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.010(R99-3.4.0)
Release 4					
ARIB	ARIB STD-T63-27.010	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27010-420.pdf
ATIS	T1.3GPP.27.010V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.010	4.2.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 010	4.2.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010Uv4R2
TTA	TTAE.3G-27.010(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.010(R4-4.2.0)

Release 5

ARIB	ARIB STD-T63-27.010	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27010-500.pdf
ATIS	T1.3GPP.27.010V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.010	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 010	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010v500
TTA	TTAT.3G-27.010(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-27.010	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A27010-600.pdf
ATIS	ATIS.3GPP.27.010V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.010	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 010	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010v600
TTA	TTAT.3G-27.010(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R6-6.0.0)

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ARIB	ARIB STD-T63-27.010	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A27010-700.pdf
ATIS	ATIS.3GPP.27.010V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.010	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 010	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0327010v700
TTA	TTAT.3G-27.010(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-27.010	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A27010-800.pdf
ATIS	ATIS.3GPP.27.010V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.010	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 010	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0327010v800
TTA	TTAT.3G-27.010(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R8-8.0.0)

5.1.2.12.30 TS 27.103**Wide area network synchronization standard**

This specification describes a definition of a wide area synchronization protocol. The synchronization protocol is based upon infrared mobile communication (IrMC) Level 4 for Release 99. The synchronization protocol is based upon SyncML from Release 4 onwards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.103	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27103-310.pdf
ATIS	T1.3GPP.27.103V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.103	3.1.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 103	3.1.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227103UR1
TTA	TTAE.3G-27.103(R99F)	3.1.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.103(R99F)
Release 4					
ARIB	ARIB STD-T63-27.103	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27103-400.pdf
ATIS	T1.3GPP.27.103V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.103	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 103	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227103Uv4
TTA	TTAE.3G-27.103(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.103(R4-4.0.0)

Release 5

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-27.103	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27103-500.pdf
ATIS	T1.3GPP.27.103V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-27.103	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 127 103	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227103v500
TTA	TTAT.3G-27.103(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.103(R5-5.0.0)

5.1.2.12.31 TS 23.227**Application and user interaction in the UE; Principles and specific requirements**

This Technical Specification defines the principles for scheduling resources between applications in different application execution environment (e.g. MExE, USAT etc.) and internal and external peripherals (e.g. infra-red, Bluetooth, USIM, radio interface, MMI, memory, etc.).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 4					
ARIB	ARIB STD-T63-23.227	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23227-420.pdf
ATIS	T1.3GPP.23.227V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.227	4.2.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 227	4.2.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223227Uv4R2
TTA	TTAE.3G-23.227(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.227(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-23.227	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23227-510.pdf
ATIS	T1.3GPP.23.227V510-2002	5.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.227	5.1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 227	5.1.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223227Uv5
TTA	TTAE.3G-23.227(R5-5.1.0)	5.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.227(R5-5.1.0)

5.1.2.12.32 TS 23.333**Multimedia Resource Function Controller - Multimedia Resource Function Processor Mp interface; Procedures descriptions**

This specification describes the functional requirements and information flows that generate procedures between the Multimedia Resource Function Controller (MRFC) and the Multimedia Resource Function Processor (MRFP), limited to information flows relevant to the Mp Interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-23.333	7.3.1	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 333	7.3.1	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0423333v731
TTA	TTAT.3G-23.333(R7-7.3.1)	7.3.1	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.333(R7-7.3.1)
TTC	TS-3GA-23.333(Rel7)v7.3.1	7.3.1	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts23333rel7v731.pdf

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SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.23.333V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.333	8.3.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 333	8.3.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0423333v830
TTA	TTAT.3G-23.333(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.333(R8-8.3.0)
TTC	TS-3GA-23.333(Rel8)v8.3.0	8.3.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23333rel8v830.pdf

5.1.2.12.33 TS 23.216**Single Radio Voice Call Continuity (SRVCC)**

This Technical Specification specifies the architecture enhancements for Single Radio Voice Call Continuity (SRVCC) between E-UTRAN access and 3GPP2's 1xCS, and between E-UTRAN access and 3GPP's UTRAN/GERAN accesses and between UTRAN (HSPA) access and 3GPP's UTRAN/GERAN accesses, for Circuit Switched (CS) calls that are anchored in the IMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.23.216V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.216	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 216	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223216v830
TTA	TTAT.3G-23.216(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.216(R8-8.3.0)
TTC	TS-3GA-23.216(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23216rel8v830.pdf

5.1.2.12.34 TS 23.272**Circuit Switched Fallback in Evolved Packet System**

This Technical Specification specifies the architecture enhancements for functionality to enable fallback from E-UTRAN access to UTRAN/GERAN CS domain access and to CDMA 1x RTT CS domain access, and functionality to reuse of voice and other CS-domain services (e.g. CS UDI video / SMS/ LCS / USSD) by reuse of CS infrastructure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.23.272V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.272	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 272	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223272v830
TTA	TTAT.3G-23.272(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.272(R8-8.3.0)
TTC	TS-3GA-23.272(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23272rel8v830.pdf

5.1.2.12.35 TS 29.212**Policy and charging control over Gx reference point**

This specification provides the stage 3 specification of the Gx reference point that lies between the Policy and Charging Rule Function and the Policy and Charging Enforcement Function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-29.212	7.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 212	7.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329212v780
TTA	TTAT.3G-29.212(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.212(R7-7.8.0)
TTC	TS-3GA-29.212(Rel7)v7.8.0	7.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29212rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.29.212V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.212	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 212	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329212v830
TTA	TTAT.3G-29.212(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.212(R8-8.3.0)
TTC	TS-3GA-29.212(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29212rel8v830.pdf

5.1.2.12.36 TS 29.213**Policy and charging control signalling flows and Quality of Service parameter mapping**

This specification adds detailed flows of Policy and Charging Control over the Rx and Gx reference points and their relationship with the bearer level signalling flows over the Gn interface. The present specification also describes the binding and the mapping of QoS parameters among SDP, UMTS QoS parameters, and QoS authorization parameters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-29.213	7.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 213	7.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329213v780
TTA	TTAT.3G-29.213(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.213(R7-7.8.0)
TTC	TS-3GA-29.213(Rel7)v7.8.0	7.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29213rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.29.213V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.213	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 213	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329213v830
TTA	TTAT.3G-29.213(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.213(R8-8.3.0)
TTC	TS-3GA-29.213(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29213rel8v830.pdf

5.1.2.12.37 TS 29.214**Policy and charging control over Rx reference point**

This specification provides the stage 3 specification of the Rx reference point that lies between the Application Function and the Policy and Charging Rule Function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-29.214	7.7.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 214	7.7.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329214v770
TTA	TTAT.3G-29.214(R7-7.7.0)	7.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.214(R7-7.7.0)
TTC	TS-3GA-29.214(Rel7)v7.7.0	7.7.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29214rel7v770.pdf
Release 8					
ATIS	ATIS.3GPP.29.214V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.214	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 214	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329214v840
TTA	TTAT.3G-29.214(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.214(R8-8.4.0)
TTC	TS-3GA-29.214(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29214rel8v840.pdf

5.1.2.12.38 TS 24.259**Personal Network Management (PNM); Procedures and information flows**

This specifications provides the protocol details for enabling Personal Network management services in the IP Multimedia Core Network subsystem based on the protocols of SIP and the SDP. The present document is applicable to UEs and AS providing PNM capabilities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.259V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.259	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 259	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124259v810
TTA	TTAT.3G-24.259(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.259(R8-8.1.0)
TTC	TS-3GA-24.259(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24259rel8v810.pdf

5.1.2.12.39 TS 23.231**SIP-I based circuit-switched core network; Stage 2**

This specification defines the stage 2 description for the SIP-I based CS core network. This stage 2 shall cover the information flows between the GMSC server, MSC server and media gateways that are required to support a SIP-I based Nc interface. The present document shall show the CS core network termination of the Iu and A interfaces in order to cover the information flow stimulus to the core network and describe the interaction with the supplementary and value added services and capabilities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.23.231V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-23.231	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 231	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0423231v830
TTA	TTAT.3G-23.231(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.231(R8-8.3.0)
TTC	TS-3GA-23.231(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23231rel8v830.pdf

5.1.2.12.40 TS 29.231**Application of SIP-I Protocols to Circuit Switched (CS) core network architecture; Stage 3**

This specification describes the protocols to be used when SIP-I is optionally used as call control protocol in a 3GPP CS core network on Nc interface. The SIP-I protocol operates between (G)MSC servers. The SIP-I architecture consists of a number of protocols. The following types of protocols are described: call control protocol, resource control protocols and user plane protocol for this architecture.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.29.231V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.231	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 231	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429231v820
TTC	TS-3GA-29.231(Rel8)v8.2.0	8.2.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29231rel8v820.pdf

5.1.2.12.41 TS 29.164**Interworking between the 3GPP Cs domain with BICC or ISUP as signalling protocol and external SIP-I networks**

This specification defines interworking procedures between a 3GPP CS domain which applies either BICC or ISUP as signalling protocol, and external networks that use SIP-I as signalling protocol. The document also describes the related interworking architecture. The present specification also defines stage 2 procedures for the control of the MGW.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-29.164	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 164	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329164v700
TTA	TTAT.3G-29.164(R7-7.0.0)	7.0.0	Approved	Apr 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.164(R7-7.0.0)
TTC	TS-3GA-29.164(Rel7)v7.0.0	7.0.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts29164rel7v700.pdf

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.29.164V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.164	8.0.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 164	8.0.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329164v800
TTA	TTAT.3G-29.164(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.164(R8-8.0.0)
TTC	TS-3GA-29.164(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts29164rel8v800.pdf

5.1.2.12.42 TS 29.235**Interworking between SIP-I based circuit-switched core network and other networks**

This specification defines the interworking between SIP-I based circuit-switched core network with out-of-band transcoder control related procedures and:– an external SIP-I based signalling network;–an ISUP based network such as an ISUP based 3GPP CS Domain or an PSTN; –an BICC based network such as an BICC based 3GPP CS Domain; – an Internet Multimedia Subsystem.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.29.235V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.235	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 235	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329235v820
TTA	TTAT.3G-29.235(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.235(R8-8.2.0)
TTC	TS-3GA-29.235(Rel8)v8.2.0	8.2.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29235rel8v820.pdf
Release 9					
TTA	TTAT.3G-29.235(R9-9.0.0)	9.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.235(R9-9.0.0)

5.1.2.12.43 TS 29.204**Signalling System No. 7 (SS7) security gateway; Architecture, functional description and protocol details**

This specification provides functional description of the SS7 Security Gateway. The document covers also network architecture, routing considerations, and protocol details.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-29.204	7.1.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 204	7.1.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGC-0429204v710
TTA	TTAT.3G-29.204(R7-7.1.0)	7.1.0	Approved	Apr 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.204(R7-7.1.0)
TTC	TS-3GA-29.204(Rel7)v7.1.0	7.1.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts29204rel7v710.pdf
Release 8					
ATIS	ATIS.3GPP.29.204V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-29.204	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 129 204	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429204v800
TTA	TTAT.3G-29.204(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.204(R8-8.0.0)
TTC	TS-3GA-29.204(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts29204rel8v800.pdf

5.1.2.12.44 TS 24.292**IP Multimedia (IM) Core Network (CN) subsystem Centralized Services (ICS); Stage 3**

IP Multimedia (IM) Core Network (CN) subsystem centralized services (ICS) allow for the delivery of consistent IMS services to the user regardless of the attached access type (e.g. CS domain access or IP-CAN). This specification provides the protocol details for the realization of ICS based on the Session Initiation protocol (SIP), the Session Description Protocol (SDP) and the protocols of the 3GPP Circuit-Switched (CS) domain (e.g. CAP, MAP, ISUP, BICC and the NAS call control protocol for the CS access).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.292V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.292	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 292	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124292v810
TTA	TTAT.3G-24.292(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.292(R8-8.1.0)
TTC	TS-3GA-24.292(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24292rel8v810.pdf

5.1.2.12.45 TS 24.301**Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3**

This specification specifies the procedures used by the protocols for mobility management and session management between User Equipment (UE) and Mobility Management Entity (MME) in the Evolved Packet System (EPS). These protocols belong to the non-access stratum (NAS). The EPS Mobility Management (EMM) protocol defined in the present document provides procedures for the control of mobility when the User Equipment (UE) is using the Evolved UMTS Terrestrial Radio Access Network (E-UTRAN). The EMM protocol also provides control of security for the NAS protocols. The EPS Session Management (ESM) protocol defined in the present document provides procedures for the handling of EPS bearer contexts. Together with the bearer control provided by the access stratum, this protocol is used for the control of user plane bearers. For both NAS protocols the present document specifies procedures for the support of inter-system mobility between E-UTRAN and other 3GPP or non-3GPP access networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.301V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.301	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 301	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124301v810
TTA	TTAT.3G-24.301(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.301(R8-8.1.0)
TTC	TS-3GA-24.301(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24301rel8v810.pdf

5.1.2.12.46 TS 24.302**Access to the 3GPP Evolved Packet Core (EPC) via non-3GPP access networks; Stage 3**

This document specifies the discovery and network selection procedures for access to 3GPP Evolved Packet Core (EPC) via non-3GPP access networks and includes Authentication and Access Authorization using Authentication, Authorization and Accounting (AAA) procedures used for the interworking of the 3GPP EPC and the non-3GPP access networks. The present document also specifies the Tunnel management procedures used for establishing an end-to-end tunnel from the UE to the ePDG to the point of obtaining IP connectivity and includes the selection of the IP mobility mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.302V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.302	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 302	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124302v810
TTA	TTAT.3G-24.292(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.292(R8-8.1.0)
TTC	TS-3GA-24.302(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24302rel8v810.pdf

5.1.2.12.47 TS 24.303**Mobility management based on Dual-Stack Mobile IPv6; Stage 3**

This document specifies the signalling procedures for accessing the 3GPP Evolved Packet Core network and handling the mobility between 3GPP and non-3GPP accesses via the S2c reference point defined in 3GPP TS 23.402. In addition the present document specifies the procedures used for the DSMIPv6 Home Agent discovery, for bootstrapping the DSMIPv6 security association between the UE and the Home Agent and for managing the DSMIPv6 tunnel. DSMIPv6 procedures can be used independently of the underlying access technology.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.303V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.303	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 303	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124303v810
TTA	TTAT.3G-24.301(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.301(R8-8.1.0)
TTC	TS-3GA-24.303(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24303rel8v810.pdf

5.1.2.12.48 TS 24.304**Mobility management based on Mobile IPv4; User Equipment (UE) - Foreign Agent interface**

This document describes the stage 3 aspects of mobility management for User Equipment (UE) using IETF Mobile IPv4 foreign agent mode to access the Evolved Packet Core Network (EPC) through trusted non-3GPP access networks and for mobility management of UE between the 3GPP access network and trusted non-3GPP access networks. In particular, this document describes the UE – Mobile IPv4 Foreign Agent (FA) interface stage 3 aspects, where the FA functionality is located within the access network in the non-3GPP access domain.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.304V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-24.304	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 124 304	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGC-0124304v800
TTA	TTAT.3G-24.304(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.304(R8-8.0.0)
TTC	TS-3GA-24.304(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24304rel8v800.pdf

5.1.2.13 System aspects

IMT-2000 CDMA Direct Spread specification also includes the following documents which are useful and related to this Recommendation.

5.1.2.13.1 TS 23.002**Network Architecture**

This specification describes the possible architectures of the mobile system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-23.002	3.6.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 002	3.6.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v360
TTC	TS-3GA-23.002(R99)v3.6.0	3.6.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts23002r99v360.pdf
Release 4					
CCSA	CCSA-TSD-DS-23.002	4.8.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 002	4.8.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v480
TTC	TS-3GA-23.002(Rel4)v4.8.0	4.8.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts23002rel4v480.pdf
Release 5					
CCSA	CCSA-TSD-DS-23.002	5.12.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 002	5.12.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v5c0
TTC	TS-3GA-23.002(Rel5)v5.12.0	5.12.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23002rel5v5c0.pdf
Release 6					
CCSA	CCSA-TSD-DS-23.002	6.10.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 002	6.10.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v6a0
TTC	TS-3GA-23.002(Rel6)v6.10.0	6.10.0	Published	Feb 06	http://www.ttc.or.jp/imt/ts/ts23002rel6v6a0.pdf

Release 7

CCSA	CCSA-TSD-DS-23.002	7.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 002	7.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v760
TTC	TS-3GA-23.002(Rel7)v7.6.0	7.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23002rel7v760.pdf

Release 8

CCSA	CCSA-TSD-DS-23.002	8.4.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 002	8.4.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v840
TTA	TTAT.3G-23.002(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.002(R8-8.4.0)
TTC	TS-3GA-23.002(Rel8)v8.4.0	8.4.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23002rel8v840.pdf

5.1.2.13.2 TS 23.101**General UMTS architecture**

This specification describes the basic physical and functional separation of UMTS. The content of this specification is limited to those features that are common to all UMTS networks independent of their origin. It identifies and names the reference points and functional groupings appearing at this level.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-23.101	3.1.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 101	3.1.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101UR1
TTC	TS-3GA-23.101(R99)v3.1.0	3.1.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts23101r99v310.pdf
Release 4					
CCSA	CCSA-TSD-DS-23.101	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 101	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101Uv4
TTC	TS-3GA-23.101(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts23101rel4v400.pdf
Release 5					
CCSA	CCSA-TSD-DS-23.101	5.0.1	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 101	5.0.1	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v501
TTC	TS-3GA-23.101(Rel5)v5.0.1	5.0.1	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23101rel5v501.pdf
Release 6					
CCSA	CCSA-TSD-DS-23.101	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 101	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v600
TTC	TS-3GA-23.101(Rel6)v6.0.0	6.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23101rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-DS-23.101	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 101	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v700
TTC	TS-3GA-23.101(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23101rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-DS-23.101	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 101	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v800
TTA	TTAT.3G-23.101(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.101(R8-8.0.0)
TTC	TS-3GA-23.101(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23101rel8v800.pdf

5.1.2.13.3 TS 23.107

QoS concept and architecture

This specification describes the framework for QoS in UMTS. The document shall be used as a living document which will cover all issues related QoS in UMTS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.107	3.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23107-390.pdf
CCSA	CCSA-TSD-DS-23.107	3.9.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 107	3.9.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v390
Release 4					
ARIB	ARIB STD-T63-23.107	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23107-460.pdf
CCSA	CCSA-TSD-DS-23.107	4.6.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 107	4.6.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v460
Release 5					
ARIB	ARIB STD-T63-23.107	5.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23107-5d0.pdf
CCSA	CCSA-TSD-DS-23.107	5.13.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 107	5.13.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v5d0
Release 6					
ARIB	ARIB STD-T63-23.107	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23107-640.pdf
CCSA	CCSA-TSD-DS-23.107	6.4.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 107	6.4.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v640
Release 7					
ARIB	ARIB STD-T63-23.107	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23107-710.pdf
CCSA	CCSA-TSD-DS-23.107	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 107	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v710
Release 8					
ARIB	ARIB STD-T63-23.107	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23107-800.pdf
CCSA	CCSA-TSD-DS-23.107	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 107	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v800
TTA	TTAT.3G-23.107(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.107(R8-8.0.0)

5.1.2.13.4 TS 23.121

Architectural requirements for release 1999

This specification describes architectural requirements for release 1999 related to the evolution of the GSM platform towards UMTS with the overall goal of fulfilling the UMTS service requirements, support of roaming and support of new functionality, signalling systems and interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-23.121	3.6.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 121	3.6.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223121v360
TTA	TTAE.3G-23.121(R99-3.6.0)	3.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.121(R99-3.6.0)
TTC	TS-3GA-23.121(R99)v3.6.0	3.6.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts23121r99v360.pdf

5.1.2.13.5 TS 23.228

IP Multimedia Subsystem Stage 2

This specifications describes the architectural requirement for an IP Multimedia Components incorporated in an UMTS System as well as second generation systems for GSM inside the core network and identify relevant interfaces to the existing system and the new one in between the new components incorporated.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-23.228	5.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23228-5f0.pdf
CCSA	CCSA-TSD-DS-23.228	5.15.0	Published	Aug 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 228	5.15.0	Published	Aug 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v5f0
TTC	TS-3GA-23.228(Rel5)v5.15.0	5.15.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23228rel5v5f0.pdf
Release 6					
ARIB	ARIB STD-T63-23.228	6.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23228-6g0.pdf
CCSA	CCSA-TSD-DS-23.228	6.16.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 228	6.16.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v6g0
TTC	TS-3GA-23.228(Rel6)v6.16.0	6.16.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23228rel6v6g0.pdf
Release 7					
ARIB	ARIB STD-T63-23.228	7.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23228-7e0.pdf
CCSA	CCSA-TSD-DS-23.228	7.14.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 228	7.14.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v7e0
TTC	TS-3GA-23.228(Rel7)v7.14.0	7.14.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23228rel7v7e0.pdf
Release 8					
ARIB	ARIB STD-T63-23.228	8.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23228-880.pdf
CCSA	CCSA-TSD-DS-23.228	8.8.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 228	8.8.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v880
TTA	TTAT.3G-23.228(R8-8.8.0)	8.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.228(R8-8.8.0)
TTC	TS-3GA-23.228(Rel8)v8.8.0	8.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23228rel8v880.pdf

5.1.2.13.6 TS 23.401**GPRS enhancements for E-UTRAN access**

This Technical Specification defines the stage 2 service description for the Evolved 3GPP Packet Switched Domain – also called the Evolved Packet System (EPS) in this document. The Evolved 3GPP Packet Switched Domain provides IP connectivity using the Evolved Universal Terrestrial Radio Access Network (E-UTRAN). The specification also covers mobility between E-UTRAN and pre-E-UTRAN 3GPP radio access technologies

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
CCSA	CCSA-TSD-DS-23.401	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 401	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223401v850
TTA	TTAT.3G-23.401(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.401(R8-8.5.0)
TTC	TS-3GA-23.401(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23401rel8v850.pdf

5.1.2.13.7 TS 23.402**Architecture Enhancements for non-3GPP accesses**

This Technical Specification defines the stage 2 service description for providing IP connectivity using non-3GPP accesses to the Evolved 3GPP Packet Switched domain. In addition, for E-UTRAN and non-3GPP accesses, the specification describes the Evolved 3GPP PS Domain where the protocols between its Core Network elements are IETF based.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
CCSA	CCSA-TSD-DS-23.402	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 123 402	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223402v850
TTA	TTAT.3G-23.402(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.402(R8-8.5.0)
TTC	TS-3GA-23.402(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23402rel8v850.pdf

5.1.2.13.8 TR 23.930**Iu principles**

This specification describes the requirements on the Iu and studies relevant principles to guide further standardization of the related interface(s).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-23.930	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 123 930	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0223930U
TTC	TR-3GA-23.930(R99)v3.0.0	3.0.0	Published	Feb 02	http://www.ttc.or.jp/imt/tr/tr23930r99v300.pdf
Release 4					
CCSA	CCSA-TSD-DS-23.930	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 123 930	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0223930Uv4
TTC	TR-3GA-23.930(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/tr/tr23930rel4v400.pdf

5.1.2.13.9 TS 22.002

Bearer services supported by a GSM PLMN

This 3G specification describes a set of bearer services to be provided to 3G subscribers by a 3G network itself and in connection with other networks. This document is also be used as a reference for defining the corresponding required mobile network capabilities which are specified by means of the connection type concept.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.002	3.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22002-360.pdf
CCSA	CCSA-TSD-DS-22.002	3.6.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 002	3.6.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002UR4
Release 4					
ARIB	ARIB STD-T63-22.002	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22002-420.pdf
CCSA	CCSA-TSD-DS-22.002	4.2.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 002	4.2.0	Published	Jul 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002Uv4R1
Release 5					
ARIB	ARIB STD-T63-22.002	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22002-500.pdf
CCSA	CCSA-TSD-DS-22.002	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 002	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v500
Release 6					
ARIB	ARIB STD-T63-22.002	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22002-600.pdf
CCSA	CCSA-TSD-DS-22.002	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 002	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v600
Release 7					
ARIB	ARIB STD-T63-22.002	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22002-700.pdf
CCSA	CCSA-TSD-DS-22.002	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 002	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v700
Release 8					
ARIB	ARIB STD-T63-22.002	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22002-800.pdf
CCSA	CCSA-TSD-DS-22.002	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 002	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v800
TTA	TTAT.3G-22.002(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.002(R8-8.0.0)

5.1.2.13.10 TS 22.004**General on supplementary services**

This specification describes a recommended set of supplementary services to the teleservices and bearer services which will be supported by a 3G network in connection with other networks as a basis for the definition of the network capabilities required.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.004	3.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 004	3.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v330
TTC	TS-3GA-22.004(R99)v3.3.0	3.3.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22004r99v330.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.004	4.3.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 004	4.3.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v430
TTC	TS-3GA-22.004(Rel4)v4.3.0	4.3.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts22004rel4v430.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.004	5.1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 004	5.1.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v510
TTC	TS-3GA-22.004(Rel5)v5.1.0	5.1.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts22004rel5v510.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.004	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 004	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v600
TTC	TS-3GA-22.004(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22004rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.004	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 004	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v700
TTC	TS-3GA-22.004(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22004rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.004	8.0.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 004	8.0.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v800
TTA	TTAT.3G-22.004(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.004(R8-8.0.0)
TTC	TS-3GA-22.004(Rel8)v8.0.0	8.0.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22004rel8v800.pdf

5.1.2.13.11 TS 22.011

Service accessibility

This specification describes the service access procedures as presented to the user. The document contains definitions and procedures are provided for international roaming, national roaming and regionally provided service. These are mandatory in relation to the technical realization of the UE.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.011	3.8.0	Published	Sep 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 011	3.8.0	Published	Sep 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v380
TTC	TS-3GA-22.011(R99)v3.8.0	3.8.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts22011r99v380.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.011	4.8.0	Published	Sep 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 011	4.8.0	Published	Sep 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v480
TTC	TS-3GA-22.011(Rel4)v4.8.0	4.8.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts22011rel4v480.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.011	5.1.0	Published	Sep 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 011	5.1.0	Published	Sep 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v510
TTC	TS-3GA-22.011(Rel5)v5.1.0	5.1.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts22011rel5v510.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.011	6.4.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 011	6.4.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v640
TTC	TS-3GA-22.011(Rel6)v6.4.0	6.4.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22011rel6v640.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.011	7.9.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 011	7.9.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v790
TTC	TS-3GA-22.011(Rel7)v7.9.0	7.9.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22011rel7v790.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.011	8.7.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 011	8.7.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v870
TTA	TTAT.3G-22.011(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.011(R8-8.7.0)
TTC	TS-3GA-22.011(Rel8)v8.7.0	8.7.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts22011rel8v870.pdf

5.1.2.13.12 TS 22.016**International mobile equipment identities (IMEI)**

This specification describes the principal purpose and use of unique equipment identities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.016	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22016-330.pdf
CCSA	CCSA-TSD-DS-22.016	3.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 016	3.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v330
Release 4					
ARIB	ARIB STD-T63-22.016	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22016-421.pdf
CCSA	CCSA-TSD-DS-22.016	4.2.1	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 016	4.2.1	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v421
Release 5					
ARIB	ARIB STD-T63-22.016	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22016-500.pdf
CCSA	CCSA-TSD-DS-22.016	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 016	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v500
Release 6					
ARIB	ARIB STD-T63-22.016	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22016-600.pdf
CCSA	CCSA-TSD-DS-22.016	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 016	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v600
Release 7					
ARIB	ARIB STD-T63-22.016	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22016-710.pdf
CCSA	CCSA-TSD-DS-22.016	7.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 016	7.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v710
Release 8					
ARIB	ARIB STD-T63-22.016	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22016-800.pdf
CCSA	CCSA-TSD-DS-22.016	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 016	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v800
TTA	TTAT.3G-22.016(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.016(R8-8.0.0)

5.1.2.13.13 TS 22.022

Personalization of GSM ME mobile functionality specification – Stage 1

This specification describes functional specifications of five features to personalize UE. These features are called: – network personalization; – network subset personalization; – service provider (SP) personalization; – corporate personalization; – UMTS subscriber identity module (USIM) personalization. This specification describes requirements for UE, which provide these personalization features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.022	3.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22022-321.pdf
CCSA	CCSA-TSD-DS-22.022	3.2.1	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 022	3.2.1	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v321
Release 4					
ARIB	ARIB STD-T63-22.022	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22022-410.pdf
CCSA	CCSA-TSD-DS-22.022	4.1.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 022	4.1.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v410
Release 5					
ARIB	ARIB STD-T63-22.022	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22022-500.pdf
CCSA	CCSA-TSD-DS-22.022	5.0.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 022	5.0.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v500
Release 6					
ARIB	ARIB STD-T63-22.022	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22022-600.pdf
CCSA	CCSA-TSD-DS-22.022	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 022	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v600
Release 7					
ARIB	ARIB STD-T63-22.022	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22022-720.pdf
CCSA	CCSA-TSD-DS-22.022	7.2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 022	7.2.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v720
Release 8					
ARIB	ARIB STD-T63-22.022	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22022-800.pdf
CCSA	CCSA-TSD-DS-22.022	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 022	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v800
TTA	TTAT.3G-22.022(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.022(R8-8.0.0)

5.1.2.13.14 TS 22.034

High speed circuit switched data (HSCSD) – Stage 1

This specification describes the Stage 1 description of HSCSD. HSCSD is a feature that allows users subscribing to the general bearer services to access user rates that can be achieved with one or more traffic channel. HSCSD also defines a flexible use of air interface resources, which makes efficient and flexible use of higher user rates feasible.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.034	3.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22034-321.pdf
CCSA	CCSA-TSD-DS-22.034	3.2.1	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 034	3.2.1	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034UR1
Release 4					
ARIB	ARIB STD-T63-22.034	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22034-410.pdf
CCSA	CCSA-TSD-DS-22.034	4.1.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 034	4.1.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v410
Release 5					
ARIB	ARIB STD-T63-22.034	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22034-500.pdf
CCSA	CCSA-TSD-DS-22.034	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 034	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v500
Release 6					
ARIB	ARIB STD-T63-22.034	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22034-600.pdf
CCSA	CCSA-TSD-DS-22.034	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 034	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v600
Release 7					
ARIB	ARIB STD-T63-22.034	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22034-700.pdf
CCSA	CCSA-TSD-DS-22.034	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 034	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v700
Release 8					
ARIB	ARIB STD-T63-22.034	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22034-800.pdf
CCSA	CCSA-TSD-DS-22.034	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 034	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v800
TTA	TTAT.3G-22.034(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.034(R8-8.0.0)

5.1.2.13.15 TS 22.038

SIM application toolkit (SAT) – Stage 1

This specification describes the Stage 1 description of the SAT primarily from the subscriber's and serving environment's points of view, and does not deal with the details of the human interface itself. It includes information applicable to network operators, serving environments and terminal, switch and database manufacturers and contains the core requirements for a SAT which are sufficient to provide a complete service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.038	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22038-340.pdf
CCSA	CCSA-TSD-DS-22.038	3.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 038	3.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v340
Release 4					
ARIB	ARIB STD-T63-22.038	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22038-430.pdf
CCSA	CCSA-TSD-DS-22.038	4.3.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 038	4.3.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v430
Release 5					
ARIB	ARIB STD-T63-22.038	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22038-540.pdf
CCSA	CCSA-TSD-DS-22.038	5.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 038	5.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v540
Release 6					
ARIB	ARIB STD-T63-22.038	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22038-650.pdf
CCSA	CCSA-TSD-DS-22.038	6.5.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 038	6.5.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v650
Release 7					
ARIB	ARIB STD-T63-22.038	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22038-750.pdf
CCSA	CCSA-TSD-DS-22.038	7.5.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 038	7.5.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v750
Release 8					
ARIB	ARIB STD-T63-22.038	8.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22038-801.pdf
CCSA	CCSA-TSD-DS-22.038	8.0.1	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 038	8.0.1	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v801
TTA	TTAT.3G-22.038(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.038(R8-8.0.1)

5.1.2.13.16 TS 22.060**General packet radio service (GPRS) – Stage 1**

This specification describes the Stage 1 description of the GPRS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.060	3.5.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 060	3.5.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060UR3
TTC	TS-3GA-22.060(R99)v3.5.0	3.5.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts22060r99v350.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.060	4.4.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 060	4.4.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v440
TTC	TS-3GA-22.060(Rel4)v4.4.0	4.4.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22060rel4v440.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.060	5.3.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 060	5.3.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v530
TTC	TS-3GA-22.060(Rel5)v5.3.0	5.3.0	Published	May 03	http://www.ttc.or.jp/imt/ts/ts22060rel5v530.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.060	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 060	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v600
TTC	TS-3GA-22.060(Rel6)v6.0.0	6.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22060rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.060	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 060	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v700
TTC	TS-3GA-22.060(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22060rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.060	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 060	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v800
TTA	TTAT.3G-22.060(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.060(R8-8.0.0)
TTC	TS-3GA-22.060(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22060rel8v800.pdf

5.1.2.13.17 TS 22.067

Priority set-up service – Stage 1 (ASCI spec)

This specification describes the Stage 1 description of the enhanced multi-level precedence and pre-emption (eMLPP) service. This service has two parts: precedence and pre-emption. Precedence involves assigning a priority level to a call in combination with fast call set-up. Pre-emption involves the seizing of resources, which are in use by a call of a lower precedence, by a higher level precedence call in the absence of idle resources. Pre-emption can also involve the disconnection of an on-going call of lower precedence to accept an incoming call of higher precedence.

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Release 99					
ARIB	ARIB STD-T63-22.067	3.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22067-301.pdf
CCSA	CCSA-TSD-DS-22.067	3.0.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 067	3.0.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0122067U
Release 4					
ARIB	ARIB STD-T63-22.067	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22067-410.pdf
CCSA	CCSA-TSD-DS-22.067	4.1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 067	4.1.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067Uv4R1
Release 5					
ARIB	ARIB STD-T63-22.067	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22067-500.pdf
CCSA	CCSA-TSD-DS-22.067	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 067	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v500
Release 6					
ARIB	ARIB STD-T63-22.067	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22067-610.pdf
CCSA	CCSA-TSD-DS-22.067	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 067	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v610
Release 7					
ARIB	ARIB STD-T63-22.067	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22067-700.pdf
CCSA	CCSA-TSD-DS-22.067	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 067	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v700
Release 8					
ARIB	ARIB STD-T63-22.067	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22067-800.pdf
CCSA	CCSA-TSD-DS-22.067	8.0.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 067	8.0.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v800
TTA	TTAT.3G-22.067(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.067(R8-8.0.0)

5.1.2.13.18 TS 22.071**Location services (LCS) – Stage 1**

LCS is a network provided enabling technology consisting of standardized service capabilities which enables the provision of location applications. This application may be service provider specific. The description of the numerous and varied possible location applications which are enabled by this technology are outside the scope of this specification. However, clarifying examples of how the functionality being specified may be used to provide specific LCS is included in various sections of the specification.

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Release 99					
ARIB	ARIB STD-T63-22.071	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22071-350.pdf
CCSA	CCSA-TSD-DS-22.071	3.5.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 071	3.5.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v350
Release 4					
ARIB	ARIB STD-T63-22.071	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22071-460.pdf
CCSA	CCSA-TSD-DS-22.071	4.6.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 071	4.6.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v460
Release 5					
ARIB	ARIB STD-T63-22.071	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22071-540.pdf
CCSA	CCSA-TSD-DS-22.071	5.4.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 071	5.4.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v540
Release 6					
ARIB	ARIB STD-T63-22.071	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22071-670.pdf
CCSA	CCSA-TSD-DS-22.071	6.7.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 071	6.7.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v670
Release 7					
ARIB	ARIB STD-T63-22.071	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22071-740.pdf
CCSA	CCSA-TSD-DS-22.071	7.4.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 071	7.4.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v740
Release 8					
ARIB	ARIB STD-T63-22.071	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22071-810.pdf
CCSA	CCSA-TSD-DS-22.071	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 071	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v810
TTA	TTAT.3G-22.071(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.071(R8-8.1.0)

5.1.2.13.19 TS 22.078

Customized applications for mobile network enhanced logic (CAMEL) – Stage 1

This specification describes the Stage 1 description for CAMEL feature which provides the mechanisms to support services consistently independently of the serving network. The CAMEL features shall facilitate service control of operator specific services external from the serving network. The CAMEL feature is a network feature and not a supplementary service. It is a tool to help the network operator to provide the subscribers with the operator specific services even when roaming outside the home network.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.078	3.9.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 078	3.9.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078UR7
TTC	TS-3GA-22.078(R99)v3.9.0	3.9.0	Published	May 02	http://www.ttc.or.jp/imt/ts/ts22078r99v390.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.078	4.5.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 078	4.5.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078Uv4R3
TTC	TS-3GA-22.078(Rel4)v4.5.0	4.5.0	Published	May 02	http://www.ttc.or.jp/imt/ts/ts22078rel4v450.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.078	5.15.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 078	5.15.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v5f0
TTC	TS-3GA-22.078(Rel5)v5.15.0	5.15.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts22078rel5v5f0.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.078	6.9.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 078	6.9.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v690
TTC	TS-3GA-22.078(Rel6)v6.9.0	6.9.0	Published	Nov 05	http://www.ttc.or.jp/imt/ts/ts22078rel6v690.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.078	7.6.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 078	7.6.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v760
TTC	TS-3GA-22.078(Rel7)v7.6.0	7.6.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22078rel7v760.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.078	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 078	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v800
TTA	TTAT.3G-22.078(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.078(R8-8.0.0)
TTC	TS-3GA-22.078(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22078rel8v800.pdf

5.1.2.13.20 TS 22.090**Unstructured supplementary service data (USSD) – Stage 1**

There are two modes of USSD: MMI-mode and application mode. MMI-mode USSD is for the transparent transport of MMI strings entered by the user to the network and for the transparent transport of text strings from the network that are displayed by the mobile for user information. Application mode USSD is for the transparent transport of data between the network and the mobile station. Application mode USSD is intended to be used by applications in the network and their peer applications in the UE. The communication over the radio interface takes place on the signalling channels using short dialogues with peak data throughput rate capabilities of up to approximately 600 bit/s outside of a call and 1 000 bit/s during a call.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.090	3.1.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 090	3.1.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090UR1
TTC	TS-3GA-22.090(R99)v3.1.0	3.1.0	Published	Nov 00	http://www.ttc.or.jp/imt/ts/ts22090r99v310.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.090	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 090	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090Uv4
TTC	TS-3GA-22.090(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts22090rel4v400.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.090	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 090	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v500
TTC	TS-3GA-22.090(Rel5)v5.0.0	5.0.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22090rel5v500.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.090	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 090	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v600
TTC	TS-3GA-22.090(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22090rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.090	7.0.0	Published	Sep 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 090	7.0.0	Published	Sep 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v700
TTC	TS-3GA-22.090(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22090rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.090	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 090	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v800
TTA	TTAT.3G-22.090(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.090(R8-8.0.0)
TTC	TS-3GA-22.090(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22090rel8v800.pdf

5.1.2.13.21 TS 22.100**UMTS phase 1 capabilities**

This specification describes contains how the definition of the UMTS system will be achieved in a phased approach. This document also specifies the requirements for release 99 of UMTS. Some requirements which are necessary to ensure a smooth transition to later releases are also indicated. This document should, however, be read in conjunction with the other 22.000 series documents which provide a complete description of the requirements for UMTS release 1999 and beyond.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.100	3.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22100-370.pdf
CCSA	CCSA-TSD-DS-22.100	3.7.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 100	3.7.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122100UR2
TTA	TTAE.3G-22.100(R99-3.7.0)	3.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-22.100(R99-3.7.0)

5.1.2.13.22 TS 22.101**UMTS service principles**

This specification describes the service principles of the UMTS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.101	3.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22101-3h0.pdf
CCSA	CCSA-TSD-DS-22.101	3.17.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 101	3.17.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v3h0
Release 4					
ARIB	ARIB STD-T63-22.101	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22101-4a0.pdf
CCSA	CCSA-TSD-DS-22.101	4.10.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 101	4.10.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v4a0
Release 5					
ARIB	ARIB STD-T63-22.101	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22101-5e0.pdf
CCSA	CCSA-TSD-DS-22.101	5.14.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 101	5.14.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v5e0
Release 6					
ARIB	ARIB STD-T63-22.101	6.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22101-6c0.pdf
CCSA	CCSA-TSD-DS-22.101	6.12.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 101	6.12.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v6c0
Release 7					
ARIB	ARIB STD-T63-22.101	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22101-7c0.pdf
CCSA	CCSA-TSD-DS-22.101	7.12.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 101	7.12.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v7c0

Release 8

ARIB	ARIB STD-T63-22.101	8.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22101-8b0.pdf
CCSA	CCSA-TSD-DS-22.101	8.11.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 101	8.11.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v8b0
TTA	TTAT.3G-22.101(R8-8.11.0)	8.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.101(R8-8.11.0)

5.1.2.13.23 TS 22.105**Services and service capabilities**

Pre-UMTS systems have largely standardized the complete sets of bearer services, teleservices and supplementary services which they provide. One major difference between UMTS and pre-UMTS systems is that service capabilities rather than services are standardized for UMTS, allowing service differentiation and system continuity. This document describes how and what kind of services the UMTS user has access to.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.105	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22105-3a0.pdf
CCSA	CCSA-TSD-DS-22.105	3.10.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 105	3.10.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105UR3
Release 4					
ARIB	ARIB STD-T63-22.105	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22105-430.pdf
CCSA	CCSA-TSD-DS-22.105	4.3.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 105	4.3.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105Uv4R1
Release 5					
ARIB	ARIB STD-T63-22.105	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R/Rel5/A22105-520.pdf
CCSA	CCSA-TSD-DS-22.105	5.2.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 105	5.2.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v520
Release 6					
ARIB	ARIB STD-T63-22.105	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22105-640.pdf
CCSA	CCSA-TSD-DS-22.105	6.4.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 105	6.4.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v640
Release 7					
ARIB	ARIB STD-T63-22.105	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22105-710.pdf
CCSA	CCSA-TSD-DS-22.105	7.1.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 105	7.1.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v710
Release 8					
ARIB	ARIB STD-T63-22.105	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22105-840.pdf
CCSA	CCSA-TSD-DS-22.105	8.4.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 105	8.4.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v840
TTA	TTAT.3G-22.105(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.105(R8-8.4.0)

5.1.2.13.24 TS 22.115

Service aspects: charging and billing

This specification describes the service aspects of charging and billing of the UMTS. This standard is not intended to duplicate existing standards or standards being developed by other groups on these topics, and will reference these where appropriate. This standard will elaborate on the charging requirements described in the charging principles in TS 22.101 UMTS service principles. It will allow the generation of accurate charging information to be used in the commercial and contractual relationships between the parties concerned.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.115	3.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 115	3.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v340
TTC	TS-3GA-22.115(R99)v3.4.0	3.4.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts22115r99v340.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.115	4.1.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 115	4.1.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v410
TTC	TS-3GA-22.115(Rel4)v4.1.0	4.1.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts22115rel4v410.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.115	5.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 115	5.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v550
TTC	TS-3GA-22.115(Rel5)v5.5.0	5.5.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22115rel5v550.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.115	6.8.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 115	6.8.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v680
TTC	TS-3GA-22.115(Rel6)v6.8.0	6.8.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22115rel6v680.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.115	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 115	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v710
TTC	TS-3GA-22.115(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22115rel7v710.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.115	8.3.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 115	8.3.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v830
TTA	TTAT.3G-22.115(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.115(R8-8.3.0)
TTC	TS-3GA-22.115(Rel8)v8.3.0	8.3.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22115rel8v830.pdf

5.1.2.13.25 TS 22.129**Handover requirements between UMTS and GSM or other radio systems**

This specification describes service requirements for handover (terms are defined below) within UMTS systems and between UMTS, other IMT-2000 family members and second generation systems. Particular emphasis has been placed on the description of requirements for handover between UMTS and GSM but requirements specific to other systems are incorporated as required.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.129	3.6.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 129	3.6.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129UR4
TTC	TS-3GA-22.129(R99)v3.6.0	3.6.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts22129r99v360.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.129	4.4.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 129	4.4.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129Uv4R2
TTC	TS-3GA-22.129(Rel4)v4.4.0	4.4.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts22129rel4v440.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.129	5.2.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 129	5.2.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v520
TTC	TS-3GA-22.129(Rel5)v5.2.0	5.2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22129rel5v520.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.129	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 129	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v610
TTC	TS-3GA-22.129(Rel6)v6.1.0	6.1.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22129rel6v610.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.129	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 129	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v700
TTC	TS-3GA-22.129(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22129rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.129	8.1.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 129	8.1.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v810
TTA	TTAT.3G-22.129(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.129(R8-8.1.0)
TTC	TS-3GA-22.129(Rel8)v8.1.0	8.1.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22129rel8v810.pdf

5.1.2.13.26 TS 22.135

Multicall

This specification describes multicall scenarios and requirements for UMTS phase 1 release 1999. Multicall feature specifies functionality and interactions related to usage of several simultaneous bearers between a terminal and a network. Multicall features allows both circuit-switched call(s) and packet session(s) to exist simultaneously.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.135	3.4.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 135	3.4.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135UR3
TTC	TS-3GA-22.135(R99)v3.4.0	3.4.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts22135r99v340.pdf
Release 4					
CCSA	CCSA-TSD-DS-22.135	4.2.0	Published	Dec 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 135	4.2.0	Published	Dec 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v420
ETSI	ETSI TS 122 135	4.2.0	Published	Dec 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v420
TTC	TS-3GA-22.135(Rel4)v4.2.0	4.2.0	Published	Feb 03	http://www.ttc.or.jp/imt/ts/ts22135rel4v420.pdf
Release 5					
CCSA	CCSA-TSD-DS-22.135	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 135	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v500
TTC	TS-3GA-22.135(Rel5)v5.0.0	5.0.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts22135rel5v500.pdf
Release 6					
CCSA	CCSA-TSD-DS-22.135	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 135	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v600
TTC	TS-3GA-22.135(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22135rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.135	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 135	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v700
TTC	TS-3GA-22.135(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22135rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.135	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 135	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v800
TTA	TTAT.3G-22.135(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.135(R8-8.0.0)
TTC	TS-3GA-22.135(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22135rel8v800.pdf

5.1.2.13.27 TS 22.146**Multimedia Broadcast/Multicast Service (MBMS) user services; Stage 1**

The document describes MBMS User Services that use the capabilities of MBMS. Application scenarios including charging, QoS aspects and related service requirements derived from them are described. These scenarios and service requirements can be used as guidance for the design of codecs and bearers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-22.146	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22146-680.pdf
CCSA	CCSA-TSD-DS-22.146	6.8.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 146	6.8.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122146v680
Release 7					
ARIB	ARIB STD-T63-22.146	7.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22146-730.pdf
CCSA	CCSA-TSD-DS-22.146	7.3.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 146	7.3.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122146v730
Release 8					
ARIB	ARIB STD-T63-22.146	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22146-840.pdf
CCSA	CCSA-TSD-DS-22.146	8.4.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 146	8.4.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122146v840
TTA	TTAT.3G-22.146(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.146(R8-8.4.0)

5.1.2.13.28 TS 22.153**Multimedia priority service**

The document specifies the service requirements for Multimedia Priority Service (MPS). Its scope is to specify those requirements of MPS necessary to provide an end-to-end service and to interwork with external networks where needed. Service interactions with external networks are considered within the scope of this document although these interactions may be specified in other standards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-22.153	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22153-820.pdf
CCSA	CCSA-TSD-DS-22.153	8.2.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 153	8.2.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122153v820
TTA	TTAT.3G-22.153(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.153(R8-8.2.0)

5.1.2.13.29 TS 22.168

Earthquake and Tsunami Warning System

The Document defines the stage one description of the Earthquake and Tsunami Warning System (ETWS) Requirements. Stage one is the set of requirements seen primarily from the user's and service provider's points of view. It includes information applicable to network operators, service providers, terminal and network manufacturers, in case of deployment of ETWS. ETWS deployment depends on operator decision or national regulations. The TS contains the core requirements for the Earthquake and Tsunami Warning System, which are sufficient to provide a complete service. It also contains regional requirements for Earthquake and Tsunami Warning System.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-22.168	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22168-810.pdf
CCSA	CCSA-TSD-DS-22.168	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 168	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0122168v810
TTA	TTAT.3G-22.168(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.168(R8-8.1.0)

5.1.2.13.30 TS 22.173

Multimedia Telephony Service and supplementary services; Stage 1

The document defines the IMS Multimedia Telephony service and the minimum set of capabilities required to secure multi-vendor and multi-operator interoperability for Multimedia Telephony and related Supplementary Services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-DS-22.173	7.5.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 173	7.5.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122173v750
TTC	TS-3GA-22.173(Rel7)v7.5.0	7.5.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22173rel7v750.pdf
Release 8					
CCSA	CCSA-TSD-DS-22.173	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 173	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122173v860
TTA	TTAT.3G-22.173(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.173(R8-8.6.0)
TTC	TS-3GA-22.173(Rel8)v8.6.0	8.6.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts22173rel8v860.pdf

5.1.2.13.31 TS 22.228**IP Multimedia Subsystem Stage 1**

This specification describes all IP Multimedia services offered by UMTS Systems and second generation systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-22.228	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22228-570.pdf
CCSA	CCSA-TSD-DS-22.228	5.7.0	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 228	5.7.0	Published	Apr 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v570
TTC	TS-3GA-22.228(Rel5)v5.7.0	5.7.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts22228rel5v570.pdf
Release 6					
ARIB	ARIB STD-T63-22.228	6.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22228-6b0.pdf
CCSA	CCSA-TSD-DS-22.228	6.11.0	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 228	6.11.0	Published	Apr 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v6b0
TTC	TS-3GA-22.228(Rel6)v6.11.0	6.11.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts22228rel6v6b0.pdf
Release 7					
ARIB	ARIB STD-T63-22.228	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22228-760.pdf
CCSA	CCSA-TSD-DS-22.228	7.6.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 228	7.6.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v760
TTC	TS-3GA-22.228(Rel7)v7.6.0	7.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22228rel7v760.pdf
Release 8					
ARIB	ARIB STD-T63-22.228	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22228-860.pdf
CCSA	CCSA-TSD-DS-22.228	8.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 228	8.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v860
TTA	TTAT.3G-22.228(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.228(R8-8.6.0)
TTC	TS-3GA-22.228(Rel8)v8.6.0	8.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22228rel8v860.pdf

5.1.2.13.32 TS 22.234**Requirements on 3GPP system to Wireless Local Area Network (WLAN) interworking**

The document specifies the functional requirements placed on the 3GPP system for interworking WLAN with the 3GPP system. Guidance is given for WLAN operators intending to provide the interworked WLAN capability.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
CCSA	CCSA-TSD-DS-22.234	6.4.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 234	6.4.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122234v640
TTC	TS-3GA-22.234(Rel6)v6.4.0	6.4.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts22234rel6v640.pdf
Release 7					
CCSA	CCSA-TSD-DS-22.234	7.6.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 234	7.6.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122234v760
TTC	TS-3GA-22.234(Rel7)v7.6.0	7.6.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts22234rel7v760.pdf

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-DS-22.234	8.1.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 234	8.1.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122234v810
TTA	TTAT.3G-22.234(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.234(R8-8.1.0)
TTC	TS-3GA-22.234(Rel8)v8.1.0	8.1.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22234rel8v810.pdf

5.1.2.13.33 TS 22.278**Service requirements for the Evolved Packet System (EPS)**

The present document specifies the functional requirements placed on the 3GPP system for interworking WLAN with the 3GPP system. Guidance is given for WLAN operators intending to provide the interworked WLAN capability.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-22.278	8.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22278-870.pdf
CCSA	CCSA-TSD-DS-22.278	8.7.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 122 278	8.7.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0122278v870
TTA	TTAT.3G-22.278(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.278(R8-8.7.0)

5.1.2.13.34 TR 22.971**Automatic establishment of roaming relations**

This report describes a proposed framework for commercial and technical interworking between UMTS home environments and serving networks who have no direct prior commercial agreements with each other. This text is applicable to UMTS standardization within ETSI, and is produced with the intent to clarify the concepts involved, and identify those areas which require standardization.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-DS-22.971	3.1.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 122 971	3.1.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0122971U
TTA	TTAE.3G-22.971(R99-3.1.1)	3.1.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-22.971(R99-3.1.1)
TTC	TR-3GA-22.971(R99)v3.1.1	3.1.1	Published	Feb 02	http://www.ttc.or.jp/imt/tr/tr22971r99v311.pdf

5.1.2.13.35 TS 21.133**Security threats and requirements**

Detailed security requirements.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-21.133	3.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A21133-320.pdf
CCSA	CCSA-TSD-DS-21.133	3.2.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 133	3.2.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0321133UR1

Release 4

ARIB	ARIB STD-T63-21.133	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A21133-410.pdf
CCSA	CCSA-TSD-DS-21.133	4.1.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 121 133	4.1.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0321133Uv4R1

5.1.2.13.36 TS 33.102**Security architecture**

Provides a specification of all security mechanisms and protocols, except algorithms.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.102	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33102-3d0.pdf
CCSA	CCSA-TSD-DS-33.102	3.13.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 102	3.13.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v3d0
Release 4					
ARIB	ARIB STD-T63-33.102	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33102-450.pdf
CCSA	CCSA-TSD-DS-33.102	4.5.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 102	4.5.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v450
Release 5					
ARIB	ARIB STD-T63-33.102	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A33102-570.pdf
CCSA	CCSA-TSD-DS-33.102	5.7.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 102	5.7.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v570
Release 6					
ARIB	ARIB STD-T63-33.102	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A33102-650.pdf
CCSA	CCSA-TSD-DS-33.102	6.5.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 102	6.5.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v650
Release 7					
ARIB	ARIB STD-T63-33.102	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A33102-710.pdf
CCSA	CCSA-TSD-DS-33.102	7.1.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 102	7.1.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v710
Release 8					
ARIB	ARIB STD-T63-33.102	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A33102-820.pdf
CCSA	CCSA-TSD-DS-33.102	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 102	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v820

5.1.2.13.37 TS 33.103

Security integration guidelines

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.103	3.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33103-370.pdf
CCSA	CCSA-TSD-DS-33.103	3.7.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 103	3.7.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333103UR6
TTA	TTAE.3G-33.103(R99-3.7.0)	3.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.103(R99-3.7.0)
Release 4					
ARIB	ARIB STD-T63-33.103	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33103-420.pdf
CCSA	CCSA-TSD-DS-33.103	4.2.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 103	4.2.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333103Uv4R2
TTA	TTAE.3G-33.103(R4-4.2.0)	4.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.103(R4-4.2.0)

5.1.2.13.38 TS 33.105

Cryptographic algorithm requirements

Defines requirements for standard cipher and integrity algorithm.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.105	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33105-380.pdf
CCSA	CCSA-TSD-DS-33.105	3.8.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 105	3.8.0	Published	Jul 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105UR6
Release 4					
ARIB	ARIB STD-T63-33.105	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33105-420.pdf
CCSA	CCSA-TSD-DS-33.105	4.2.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 105	4.2.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v420
Release 5					
ARIB	ARIB STD-T63-33.105	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A33105-500.pdf
CCSA	CCSA-TSD-DS-33.105	5.0.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 105	5.0.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v500
Release 6					
ARIB	ARIB STD-T63-33.105	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A33105-600.pdf
CCSA	CCSA-TSD-DS-33.105	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 105	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v600
Release 7					
ARIB	ARIB STD-T63-33.105	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A33105-700.pdf
CCSA	CCSA-TSD-DS-33.105	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 105	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v700

Release 8

ARIB	ARIB STD-T63-33.105	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A33105-800.pdf
CCSA	CCSA-TSD-DS-33.105	8.0.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 105	8.0.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v800
TTA	TTAT.3G-33.105(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-33.105(R8-8.0.0)

5.1.2.13.39 TS 33.106**Lawful interception requirements**

Defines all requirements for network based lawful interception.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.106	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33106-310.pdf
CCSA	CCSA-TSD-DS-33.106	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 106	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0333106U
Release 4					
ARIB	ARIB STD-T63-33.106	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33106-400.pdf
CCSA	CCSA-TSD-DS-33.106	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 106	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106Uv4
Release 5					
ARIB	ARIB STD-T63-33.106	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A33106-510.pdf
CCSA	CCSA-TSD-DS-33.106	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 106	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v510
Release 6					
ARIB	ARIB STD-T63-33.106	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A33106-610.pdf
CCSA	CCSA-TSD-DS-33.106	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 106	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v610
Release 7					
ARIB	ARIB STD-T63-33.106	7.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A33106-701.pdf
CCSA	CCSA-TSD-DS-33.106	7.0.1	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 106	7.0.1	Published	Apr 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v701
Release 8					
ARIB	ARIB STD-T63-33.106	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A33106-810.pdf
CCSA	CCSA-TSD-DS-33.106	8.1.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 106	8.1.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v810
TTA	TTAT.3G-33.106(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-33.106(R8-8.1.0)

5.1.2.13.40 TS 33.120

Security objectives and principles

Elaborates on the basic principles underlying the security.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.120	3.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33120-300.pdf
CCSA	CCSA-TSD-DS-33.120	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 120	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0333120U
TTA	TTAE.3G-33.120(R99-3.0.0)	3.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.120(R99-3.0.0)
Release 4					
ARIB	ARIB STD-T63-33.120	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33120-400.pdf
CCSA	CCSA-TSD-DS-33.120	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 133 120	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333120Uv4
TTA	TTAE.3G-33.120(R4-4.0.0)	4.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.120(R4-4.0.0)

5.1.2.13.41 TR 33.901

Criteria for cryptographic algorithm design process

This report describes the process used to design cipher and integrity algorithm.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB TR-T12-33.901	3.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33901-300.pdf
CCSA	CCSA-TSD-DS-33.901	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 133 901	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0333901U
TTA	TTAE.3G-33.901(R99-3.0.0)	3.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.901(R99-3.0.0)
Release 4					
ARIB	ARIB TR-T12-33.901	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33901-400.pdf
CCSA	CCSA-TSD-DS-33.901	4.0.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 133 901	4.0.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0333901Uv4
TTA	TTAE.3G-33.901(R4-4.0.0)	4.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.901(R4-4.0.0)

5.1.2.13.42 TR 33.902**Formal analysis of the 3G authentication protocol with modified sequence number management**

Formal analysis using BAN and temporal logic of authentication mechanism.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB TR-T12-33.902	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33902-310.zip
CCSA	CCSA-TSD-DS-33.902	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 133 902	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0333902U
TTA	TTAE.3G-33.902(R99-3.1.0)	3.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.902(R99-3.1.0)
Release 4					
ARIB	ARIB TR-T12-33.902	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33902-400.zip
CCSA	CCSA-TSD-DS-33.902	4.0.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 133 902	4.0.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0333902Uv4
TTA	TTAE.3G-33.902(R4-4.0.0)	4.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.902(R4-4.0.0)

5.1.2.13.43 TS 26.071**AMR speech codec: general description**

This specification describes an introduction to the set of the adaptive multi-rate (AMR) specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.071	3.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26071-301.pdf
CCSA	CCSA-TSD-DS-26.071	3.0.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 071	3.0.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426071U
Release 4					
ARIB	ARIB STD-T63-26.071	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26071-400.pdf
CCSA	CCSA-TSD-DS-26.071	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 071	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071Uv4
Release 5					
ARIB	ARIB STD-T63-26.071	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26071-500.pdf
CCSA	CCSA-TSD-DS-26.071	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 071	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v500
Release 6					
ARIB	ARIB STD-T63-26.071	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26071-600.pdf
CCSA	CCSA-TSD-DS-26.071	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 071	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v600
Release 7					
ARIB	ARIB STD-T63-26.071	7.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26071-701.pdf
CCSA	CCSA-TSD-DS-26.071	7.0.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 071	7.0.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v701

Release 8

ARIB	ARIB STD-T63-26.071	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26071-800.pdf
CCSA	CCSA-TSD-DS-26.071	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 071	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v800
TTA	TTAT.3G-26.071(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.071(R8-8.0.0)

5.1.2.13.44 TS 26.090**AMR speech codec: transcoding functions**

This specification describes a detailed description of the AMR speech codec transcoding functions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.090	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26090-310.pdf
CCSA	CCSA-TSD-DS-26.090	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 090	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426090U
Release 4					
ARIB	ARIB STD-T63-26.090	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26090-400.pdf
CCSA	CCSA-TSD-DS-26.090	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 090	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090Uv4
Release 5					
ARIB	ARIB STD-T63-26.090	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26090-500.pdf
CCSA	CCSA-TSD-DS-26.090	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 090	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v500
Release 6					
ARIB	ARIB STD-T63-26.090	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26090-600.pdf
CCSA	CCSA-TSD-DS-26.090	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 090	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v600
Release 7					
ARIB	ARIB STD-T63-26.090	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26090-700.pdf
CCSA	CCSA-TSD-DS-26.090	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 090	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v700
Release 8					
ARIB	ARIB STD-T63-26.090	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26090-800.pdf
CCSA	CCSA-TSD-DS-26.090	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 090	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v800
TTA	TTAT.3G-26.090(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.090(R8-8.0.0)

5.1.2.13.45 TS 26.091**AMR speech codec: error concealment of lost frames**

This specification describes example procedures for the error concealment, also called frame substitution or muting procedure, of lost speech or silence indicator frames.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.091	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26091-310.pdf
CCSA	CCSA-TSD-DS-26.091	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 091	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426091U
Release 4					
ARIB	ARIB STD-T63-26.091	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26091-400.pdf
CCSA	CCSA-TSD-DS-26.091	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 091	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091Uv4
Release 5					
ARIB	ARIB STD-T63-26.091	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26091-500.pdf
CCSA	CCSA-TSD-DS-26.091	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 091	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v500
Release 6					
ARIB	ARIB STD-T63-26.091	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26091-600.pdf
CCSA	CCSA-TSD-DS-26.091	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 091	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v600
Release 7					
ARIB	ARIB STD-T63-26.091	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26091-700.pdf
CCSA	CCSA-TSD-DS-26.091	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 091	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v700
Release 8					
ARIB	ARIB STD-T63-26.091	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26091-800.pdf
CCSA	CCSA-TSD-DS-26.091	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 091	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v800
TTA	TTAT.3G-26.091(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.091(R8-8.0.0)

5.1.2.13.46 TS 26.092

AMR speech codec: comfort noise aspects

This specification describes the detailed requirements for the correct operation of the background acoustic noise evaluation, noise parameter encoding/decoding and comfort noise generation for the AMR speech codec during source controlled rate (SCR) operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.092	3.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26092-301.pdf
CCSA	CCSA-TSD-DS-26.092	3.0.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 092	3.0.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426092U
Release 4					
ARIB	ARIB STD-T63-26.092	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26092-400.pdf
CCSA	CCSA-TSD-DS-26.092	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 092	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092Uv4
Release 5					
ARIB	ARIB STD-T63-26.092	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26092-500.pdf
CCSA	CCSA-TSD-DS-26.092	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 092	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v500
Release 6					
ARIB	ARIB STD-T63-26.092	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26092-600.pdf
CCSA	CCSA-TSD-DS-26.092	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 092	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v600
Release 7					
ARIB	ARIB STD-T63-26.092	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26092-700.pdf
CCSA	CCSA-TSD-DS-26.092	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 092	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v700
Release 8					
ARIB	ARIB STD-T63-26.092	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26092-800.pdf
CCSA	CCSA-TSD-DS-26.092	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 092	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v800
TTA	TTAT.3G-26.092(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.092(R8-8.0.0)

5.1.2.13.47 TS 26.093**AMR speech codec: source controlled rate (SCR) operation**

This specification describes the operation of the AMR speech codec during SCR operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.093	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26093-330.pdf
CCSA	CCSA-TSD-DS-26.093	3.3.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 093	3.3.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093UR2
Release 4					
ARIB	ARIB STD-T63-26.093	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26093-400.pdf
CCSA	CCSA-TSD-DS-26.093	4.0.0	Published	Aug 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 093	4.0.0	Published	Aug 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v400
Release 5					
ARIB	ARIB STD-T63-26.093	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26093-520.pdf
CCSA	CCSA-TSD-DS-26.093	5.2.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 093	5.2.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v520
Release 6					
ARIB	ARIB STD-T63-26.093	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26093-610.pdf
CCSA	CCSA-TSD-DS-26.093	6.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 093	6.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v610
Release 7					
ARIB	ARIB STD-T63-26.093	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26093-700.pdf
CCSA	CCSA-TSD-DS-26.093	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 093	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v700
Release 8					
ARIB	ARIB STD-T63-26.093	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26093-800.pdf
CCSA	CCSA-TSD-DS-26.093	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 093	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v800
TTA	TTAT.3G-26.093(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.093(R8-8.0.0)

5.1.2.13.48 TS 26.094**AMR speech codec: voice activity detector (VAD)**

This specification describes two alternatives for the VAD to be used during SCR operation in conjunction with the AMR codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.094	3.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26094-300.pdf
CCSA	CCSA-TSD-DS-26.094	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 094	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426094U

Release 4

ARIB	ARIB STD-T63-26.094	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26094-400.pdf
CCSA	CCSA-TSD-DS-26.094	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 094	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094Uv4

Release 5

ARIB	ARIB STD-T63-26.094	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26094-500.pdf
CCSA	CCSA-TSD-DS-26.094	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 094	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v500

Release 6

ARIB	ARIB STD-T63-26.094	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26094-610.pdf
CCSA	CCSA-TSD-DS-26.094	6.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 094	6.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v610

Release 7

ARIB	ARIB STD-T63-26.094	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26094-700.pdf
CCSA	CCSA-TSD-DS-26.094	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 094	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v700

Release 8

ARIB	ARIB STD-T63-26.094	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26094-800.pdf
CCSA	CCSA-TSD-DS-26.094	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 094	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v800
TTA	TTAT.3G-26.094(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.094(R8-8.0.0)

5.1.2.13.49 TS 26.110**Codec for circuit-switched multimedia telephony service: general description**

This specification describes an introduction to the set of specifications for the support of circuit-switched 3G-324M multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.110	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26110-310.pdf
CCSA	CCSA-TSD-DS-26.110	3.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 110	3.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110UR1
Release 4					
ARIB	ARIB STD-T63-26.110	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26110-410.pdf
CCSA	CCSA-TSD-DS-26.110	4.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 110	4.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110Uv4
Release 5					
ARIB	ARIB STD-T63-26.110	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26110-500.pdf
CCSA	CCSA-TSD-DS-26.110	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 110	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v500

Release 6

ARIB	ARIB STD-T63-26.110	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26110-600.pdf
CCSA	CCSA-TSD-DS-26.110	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 110	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v600

Release 7

ARIB	ARIB STD-T63-26.110	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26110-700.pdf
CCSA	CCSA-TSD-DS-26.110	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 110	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v700

Release 8

ARIB	ARIB STD-T63-26.110	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26110-800.pdf
CCSA	CCSA-TSD-DS-26.110	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 110	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v800
TTA	TTAT.3G-26.110(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.110(R8-8.0.0)

5.1.2.13.50 TS 26.111**Codec for circuit-switched multimedia telephony service: modifications to ITU-T Recommendation H.324**

This specification describes the modifications applicable to the ITU-T Recommendation H.324, Annex C for the support of circuit-switched 3G-324M multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.111	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26111-340.pdf
CCSA	CCSA-TSD-DS-26.111	3.4.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 111	3.4.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111UR3
Release 4					
ARIB	ARIB STD-T63-26.111	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26111-400.pdf
CCSA	CCSA-TSD-DS-26.111	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 111	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111Uv4
Release 5					
ARIB	ARIB STD-T63-26.111	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26111-510.pdf
CCSA	CCSA-TSD-DS-26.111	5.1.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 111	5.1.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v510
Release 6					
ARIB	ARIB STD-T63-26.111	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26111-620.pdf
CCSA	CCSA-TSD-DS-26.111	6.2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 111	6.2.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v620
Release 7					
ARIB	ARIB STD-T63-26.111	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26111-710.pdf
CCSA	CCSA-TSD-DS-26.111	7.1.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 111	7.1.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v710

Release 8

ARIB	ARIB STD-T63-26.111	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26111-800.pdf
CCSA	CCSA-TSD-DS-26.111	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TS 126 111	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v800
TTA	TTAT.3G-26.111(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.111(R8-8.0.0)

5.1.2.13.51 TR 26.911**Codec for circuit-switched multimedia telephony service: terminal implementor's guide**

This report describes non-mandatory Recommendations for the use of the different codec implementation options for the circuit-switched 3G-324M multimedia telephony service based on ITU-T Recommendation H.324, Annex C. These Recommendations address issues specific to the third generation operating environment, including guaranteeing sufficient error resilience and inter-working between terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB TR-T12-26.911	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26911-340.pdf
CCSA	CCSA-TSD-DS-26.911	3.4.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 126 911	3.4.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v340
Release 4					
ARIB	ARIB TR-T12-26.911	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26911-420.pdf
CCSA	CCSA-TSD-DS-26.911	4.2.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 126 911	4.2.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v420
Release 5					
ARIB	ARIB TR-T12-26.911	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26911-510.pdf
CCSA	CCSA-TSD-DS-26.911	5.1.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 126 911	5.1.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v510
Release 6					
ARIB	ARIB TR-T12-26.911	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26911-600.pdf
CCSA	CCSA-TSD-DS-26.911	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 126 911	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v600
Release 7					
ARIB	ARIB TR-T12-26.911	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26911-710.pdf
CCSA	CCSA-TSD-DS-26.911	7.1.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 126 911	7.1.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v710
Release 8					
ARIB	ARIB TR-T12-26.911	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26911-800.pdf
CCSA	CCSA-TSD-DS-26.911	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 126 911	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v800
TTA	TTAT.3G-26.911(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.911(R8-8.0.0)

5.1.2.14 Vocabulary**5.1.2.14.1 TR 21.905****Vocabulary**

Document 21.905 is a collection of terms, definitions and abbreviations related to the baseline documents defining the objectives and systems framework. This document provides a tool for further work on the technical documentation and facilitates their understanding.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB TR-T12-21.905	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A21905-330.pdf
ATIS	T1.3GPP.21.905V330-2002	3.3.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.905	3.3.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 121 905	3.3.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905UR3
TTA	TTAE.3G-21.905(R99-3.3.0)	3.3.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-21.905(R99-3.3.0)
TTC	TR-3GA-21.905(R99)v3.3.0	3.3.0	Published	Nov 01	http://www.ttc.or.jp/imt/tr/tr21905r99v330.pdf
Release 4					
ARIB	ARIB TR-T12-21.905	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A21905-450.pdf
ATIS	T1.3GPP.21.905V450-2004	4.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.905	4.5.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 121 905	4.5.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v450
TTA	TTAT.3G-21.905(R4-4.5.0)	4.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R4-4.5.0)
TTC	TR-3GA-21.905(Rel4)v4.5.0	4.5.0	Published	Aug 03	http://www.ttc.or.jp/imt/tr/tr21905rel4v450.pdf
Release 5					
ARIB	ARIB TR-T12-21.905	5.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A21905-5a0.pdf
ATIS	ATIS.3GPP.21.905V5100-2006	5.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.905	5.10.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 121 905	5.10.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v5a0
TTA	TTAT.3G-21.905(R5-5.10.0)	5.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R5-5.10.0)
TTC	TR-3GA-21.905(Rel5)v5.10.0	5.10.0	Published	Nov 05	http://www.ttc.or.jp/imt/tr/tr21905rel5v5a0.pdf
Release 6					
ARIB	ARIB TR-T12-21.905	6.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A21905-6a0.pdf
ATIS	ATIS.3GPP.21.905V6100-2006	6.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.905	6.10.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 121 905	6.10.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v6a0
TTA	TTAT.3G-21.905(R6-6.10.0)	6.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R6-6.10.0)
TTC	TR-3GA-21.905(Rel6)v6.10.0	6.10.0	Published	Nov 05	http://www.ttc.or.jp/imt/tr/tr21905rel6v6a0.pdf
Release 7					
ARIB	ARIB TR-T12-21.905	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A21905-740.pdf
ATIS	ATIS.3GPP.21.905V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.905	7.4.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 121 905	7.4.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v740
TTA	TTAT.3G-21.905(R7-7.4.0)	7.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R7-7.4.0)
TTC	TR-3GA-21.905(Rel7)v7.4.0	7.4.0	Published	Jan 08	http://www.ttc.or.jp/imt/tr/tr21905rel7v740.pdf

Release 8

ARIB	ARIB TR-T12-21.905	8.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A21905-880.pdf
ATIS	ATIS.3GPP.21.905V880-2009	8.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-DS-21.905	8.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/DS/
ETSI	ETSI TR 121 905	8.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v880
TTA	TTAT.3G-21.905(R8-8.8.0)	8.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R8-8.8.0)
TTC	TR-3GA-21.905(Rel8)v8.8.0	8.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/tr21905rel8v880.pdf

Release 9

TTA	TTAT.3G-21.905(R9-9.1.0)	9.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R9-9.1.0)
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5.2 IMT-2000 CDMA Multi-Carrier

5.2.1 Overview of the set of radio interface FDD/TDD components

5.2.1.1 FDD Component

5.2.1.1.1 Introduction

The IMT-2000 radio interface specifications for CDMA multi-carrier (MC) technology are developed by a partnership of SDOs (see Note 1). This radio interface is called cdma2000.

NOTE 1 – Currently, these specifications are developed within the third generation partnership project 2 (3GPP2), where the participating SDOs are ARIB, CCSA, TTA and TTC.

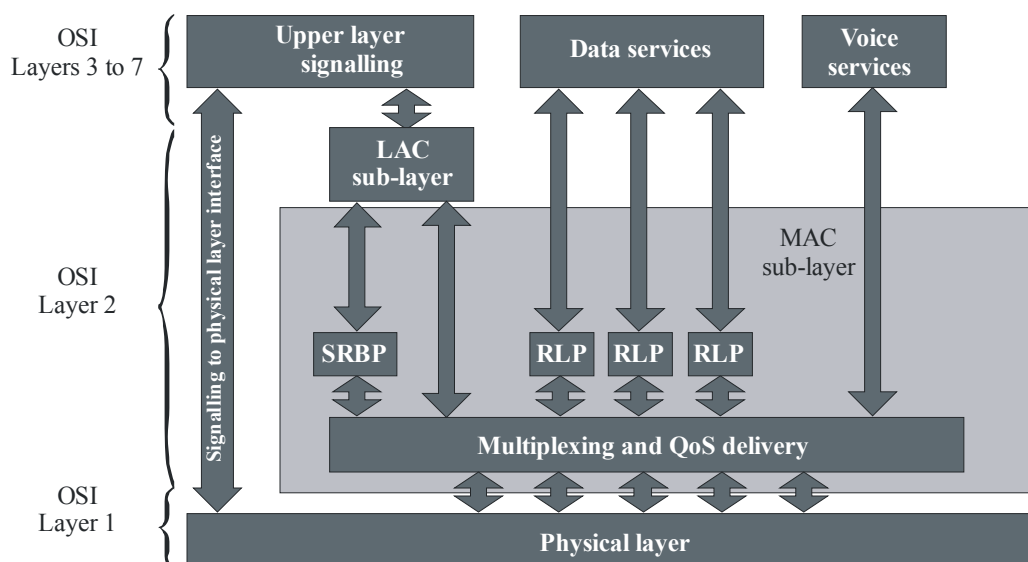
In the development of this radio interface the CN specifications are based on an evolved ANSI-41 and IP network, but the specifications include the necessary capabilities for operation with an evolved GSM-MAP-based CN or a CN based on IETF protocols.

This radio interface is a wideband spread spectrum radio interface that utilizes CDMA technology in order to meet the needs of the 3G wireless communication systems and to meet the requirements for the 3G evolution of the current 2G TIA/EIA-95-B family of standards.

As shown in Fig. 18, this radio interface has a layered structure that provides a combination of voice, packet data, and circuit data services, according to the ISO/OSI reference model (i.e. Layer 1 – the physical layer, and Layer 2 – the link layer). Layer 2 is further subdivided into the link access control (LAC) sub-layer and the MAC sub-layer. Applications and upper layer protocols corresponding to OSI Layers 3 through 7 utilize the services provided by the LAC services, e.g. signalling services, voice services, data services (packet data and circuit data).

FIGURE 18

General radio interface architecture



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In this radio interface a generalized multimedia service model is supported. This allows any combination of voice, packet data, and circuit data services to be operated. The radio interface also includes a QoS control mechanism to balance the varying QoS requirements of multiple concurrent services (e.g. to support ISDN or RSVP network layer QoS capabilities).

The physical layer supports RF channel bandwidths of $N \times 1.25$ MHz, where N is the spreading rate number. The data rates, channel encoding, and modulation parameters supported on the traffic channels are specified by radio configurations. For Spreading rates 1 and 3, there are seven radio configurations for the reverse link and there are ten radio configurations for the forward link. Collectively, these radio configurations form the radio interface, which consists of the 1X and 3X components. Spreading rate 1 corresponds to 1X. Spreading rate 3 corresponds to 3X. Radio configurations 1 and 2 are specified to be backward compatible with TIA/EIA-95-B systems. The radio interface also supports a class of operational band plans as specified in the TIA/EIA/IS-2000 standard.

This family of standards supports multi-carrier systems in contiguous and non-contiguous operation with two or more carriers each with bandwidths of up to 20 MHz.

This specification includes a flexible and efficient MAC sub-layer that supports multiple data service state machine instances, one for each active packet or circuit data service instance. Along with the multiplexing QoS control entity, the MAC realizes the complex multimedia, multi-service capabilities of 3G wireless systems with QoS management capabilities for each active service.

This specification also introduces a LAC sub-layer to provide reliable transmission over the air for signalling services. To provide flexible voice services, this radio interface provides the framework and the services to transport encoded voice data in the form of packet data or circuit data traffic, as well as in a manner that is backward compatible with the TIA/EIA-95-B family of standards (i.e. the encoded voice data is transported directly by the physical layer). In the latter case, the LAC and MAC services are null. The LAC sub-layer provides an ARQ (retransmission) protocol.

5.2.1.1.2 Physical layer

5.2.1.1.2.1 Reverse link (uplink)

5.2.1.1.2.1.1 Radio configurations 1 through 6

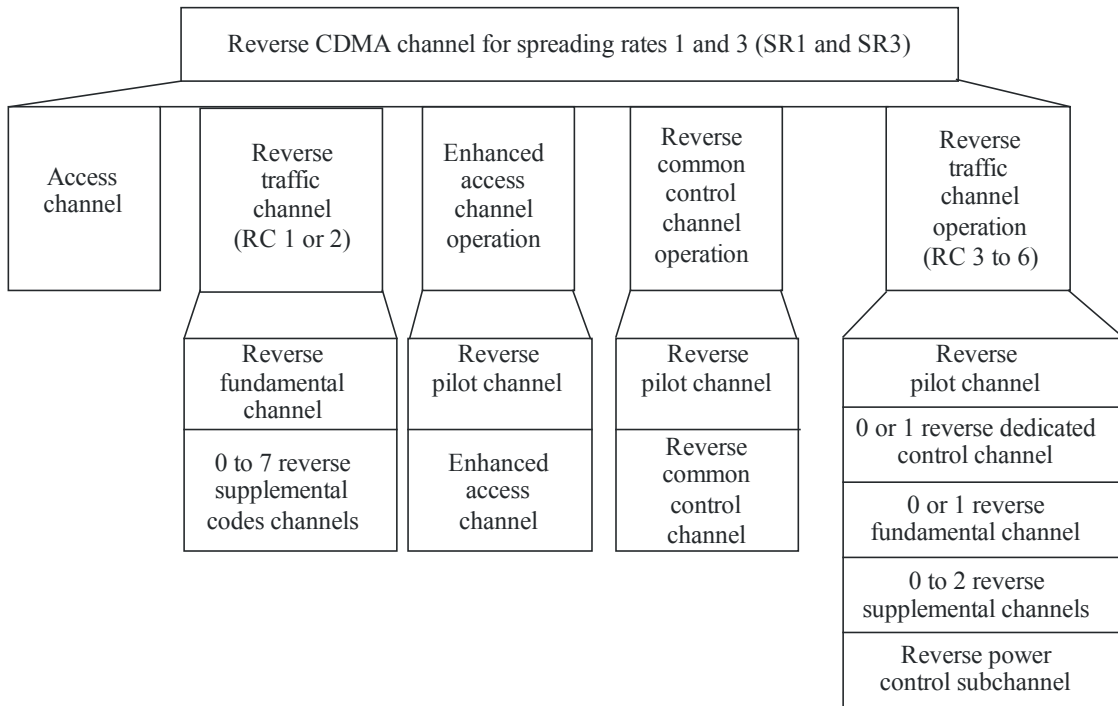
Figure 19 shows the reverse CDMA Channels received at the BS. The reverse pilot channel is an unmodulated spread spectrum signal used to assist the BS in detecting the mobile station transmission. The mobile station also inserts a reverse power control subchannel in the reverse pilot channel. The reverse power control subchannel is used to transmit forward power control commands. The access channel is used by the mobile station to initiate communication with the BS and to respond to paging channel messages. The enhanced access channel is used by the mobile station to initiate communication with the BS or to respond to a mobile station directed message. The reverse common control channel is used for the transmission of user and signalling information to the BS when reverse traffic channels are not in use. The reverse traffic channels with radio configurations 1 and 2 include the reverse fundamental channel and reverse supplemental code channel. The reverse traffic channels with radio configurations 3 through 6 include the reverse dedicated control channel, reverse fundamental channel, and reverse supplemental channel. The reverse dedicated control channel and reverse fundamental channel are used for the transmission of user and signalling information to the BS during a call. The reverse supplemental channel and reverse supplemental code channel are used for the transmission of user information to the BS during a call.

Figure 20 shows the reverse channel structure (except the pilot channel). Channel encoded symbols are repeated and punctured to match a nominal value of data rate. Block interleaving is used on the access channel, the enhanced access channel, the reverse common control channel, and the reverse traffic channels. The channel encoded and interleaved symbols are modulated and are direct spread prior to transmission. The spreading chip rate is $N \times 1.2288$ Mchip/s (N is the spreading rate number described above). Figure 21 shows the uplink spreading and the modulation operation for radio configurations 3 through 6.

The mobile station supports three types of forward link power control based upon: 800 Hz feedback; the erasure indicator bits (EIB); and the quality indicator bits (QIB). The feedback is on the reverse power control subchannel. For the 800 Hz feedback mode, the outer loop estimates the setpoint value based on E_b/N_f to achieve the target FER on each assigned forward traffic channel. The inner loop compares the E_b/N_f of the received forward traffic channel with the corresponding outer loop setpoint to determine the value of the power control bit to be sent on the reverse power control subchannel every 1.25 ms.

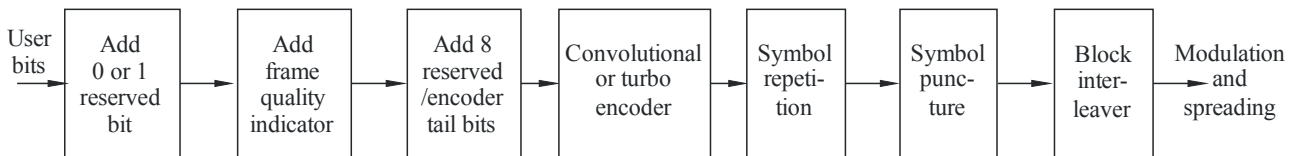
Uplink soft handoff is achieved by performing diversity or selection combining at the BS.

FIGURE 19
Reverse CDMA channels received at the Base Station



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FIGURE 20
Reverse channels structure (except the pilot channel)



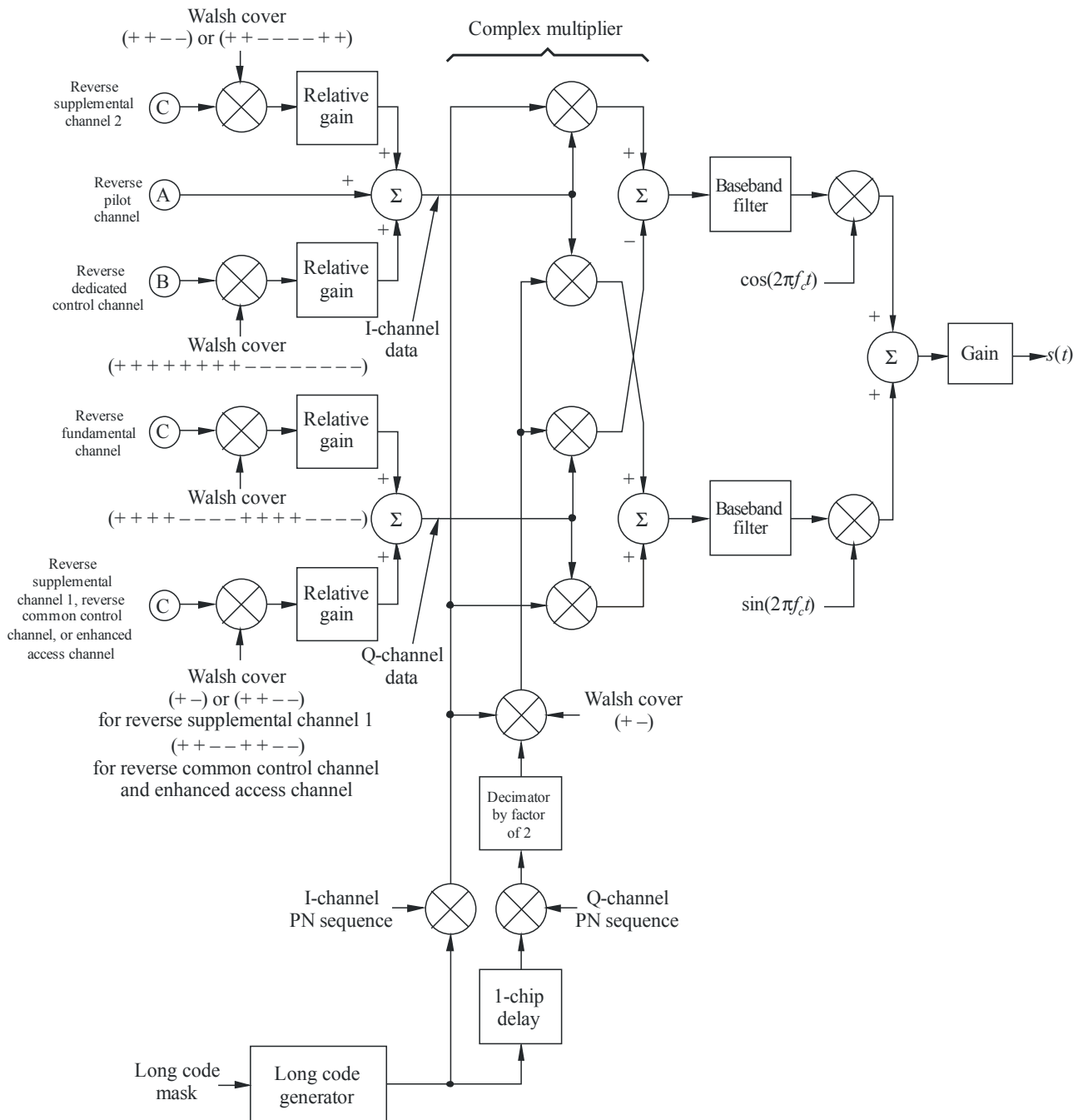
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5.2.1.1.2.1.2 High Rate Packet Data (HRPD) Access

The High Rate Packet Date Access family of standards, also known as Evolution Data Optimized (EV-DO), provide full QoS and efficient support for a wide variety of applications, backward compatible multi-carrier support, broadcast/multicast, flexible duplex and hybrid frequency reuse.

FIGURE 21

Uplink spreading and modulation for radio configurations 3 and above



M.1457-21

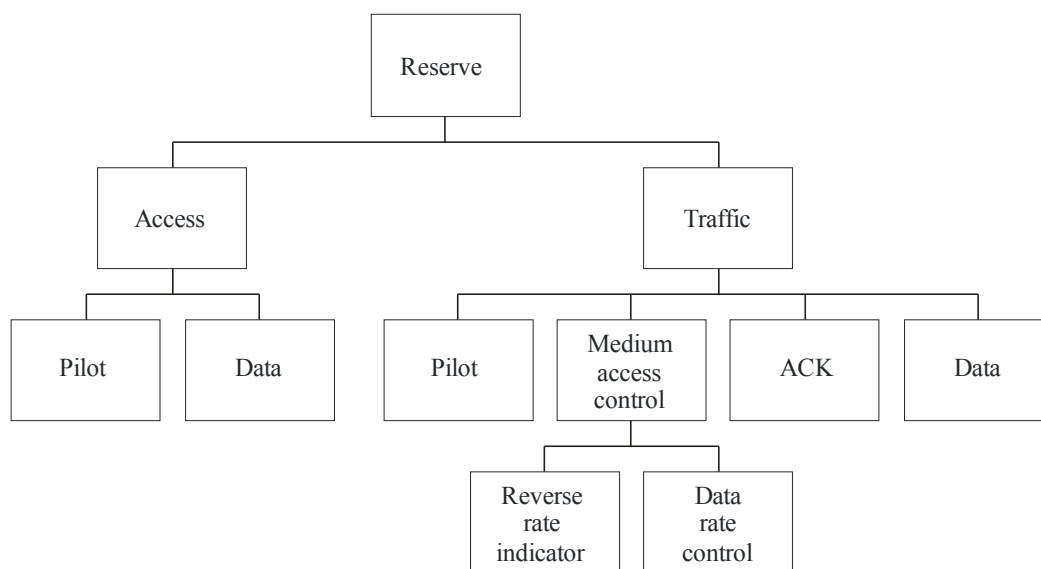
5.2.1.1.2.1.2.1 High Rate Packet Data Release 0 and Revision A

The Release 0 and Revision A standards deploy a Reverse CDMA Channel on a dedicated 1X RF Channel. This Reverse CDMA Channel consists of the Access Channel and the Reverse Traffic Channel as shown in Fig. 21a. The Access Channel is used by the access terminal to initiate communication with the access network or to respond to an access terminal directed message. The Access Channel consists of a Pilot Channel and a Data Channel. The Reverse Traffic Channel is used by the mobile station to transmit user-specific traffic or signalling information to the access network. The Reverse Traffic Channel comprises a Pilot Channel, a Reverse Rate Indicator (RRI) Channel, a Data Rate Control (DRC) Channel, an Acknowledgement (ACK) Channel, and a Data Channel. The RRI Channel is used to indicate the data rate

transmitted on the Reverse Traffic Channel. The RRI Channel is time-multiplexed with the Pilot Channel. The DRC Channel is used by the mobile station to indicate to the access network the supportable Forward Traffic Channel data rate and the best serving sector on the Forward CDMA Channel. The ACK Channel is used by the access terminal to inform the access network whether or not the data packet transmitted on the Forward Traffic Channel has been received successfully.

For the enhanced HRPD access, physical layer H-ARQ (Hybrid Automatic Repeat Request), shorter frame sizes, fast scheduling/rate-control, and adaptive modulation and coding are implemented to increase the peak data rate and system throughput of the reverse link.

FIGURE 21a
Reverse CDMA channel for high rate packet data access



1457-21a

5.2.1.1.2.1.2.2 High Rate Packet Data Revision B

The High Rate Packet Data Revision B standard specifies a multi-carrier system with a bandwidth of up to 20 MHz. Each carrier is 1.25 MHz wide and terminals may support one or more carriers. Non-contiguous CDMA carrier operation is also supported. Revision B is compatible with Revision A systems, and Release 0 and Revision A terminals can operate on Revision B networks. A peak terminal transmit data rate of 27.6 Mbit/s is supported in a 20 MHz bandwidth.

5.2.1.1.2.1.3 High Rate Packet Data with Voice

The High Rate Packet Data with Voice (1xEV-DV) includes enhanced features allowing for high-speed packet data transmission, higher spectral efficiency, and simultaneous high-speed packet data and real-time services, such as voice, on a single 1.25 MHz RF carrier. The high data rates are achieved with the support of key features, such as adaptive modulation and coding, higher-order modulation, fast scheduling, and hybrid ARQ (Automatic Repeat Request).

For the enhanced 1xEV-DV access, physical layer hybrid ARQ, shorter frames, fast scheduling/rate-control, and adaptive modulation and coding are also used to increase the peak data rate and system throughput of the reverse link.

5.2.1.1.2.1.4 Ultra Mobile Broadband (UMB) System

The UMB system provides high peak data rates, good spectral efficiency, low latency, improved terminal battery life, high capacity and enhanced user experience for delay-sensitive applications such as VoIP and video telephony.

The UMB system provides a unified design for full- and half-duplex FDD modes of operation with support for scalable bandwidths. The system is designed for robust mobile broadband access, and is optimized for high spectral efficiency and short latencies using advanced modulation, link adaptation, and multi-antenna transmission techniques. Fast handoff, fast power control, and inter-sector interference management are used. Adaptive coding and modulation with synchronous H-ARQ and turbo coding are used for achieving high spectral efficiencies. Sub-band scheduling provides enhanced performance on the reverse link by exploiting multi-user diversity gains for latency-sensitive traffic. The reverse link retransmission latency is approximately 7 ms and the peak data rate is over 70 Mbit/s in a 20 MHz bandwidth.

The reverse link is quasi-orthogonal. That is, it employs orthogonal transmission based on OFDMA, together with non-orthogonal user multiplexing with layered superposition or multiple receive antennas (SDMA). The reverse link also includes optional CDMA transmission for low-rate traffic. Interference management is obtained through fractional frequency reuse. An optimized throughput/fairness trade-off is obtained through distributed power control based on other-cell interference. The reverse link employs a CDMA control segment and OFDMA control segments. The system employs fast access with reduced overhead and fast requests. The reverse link employs a broadband reference signal for power control, handoff decisions, and sub-band scheduling. Efficient handoff support is also provided.

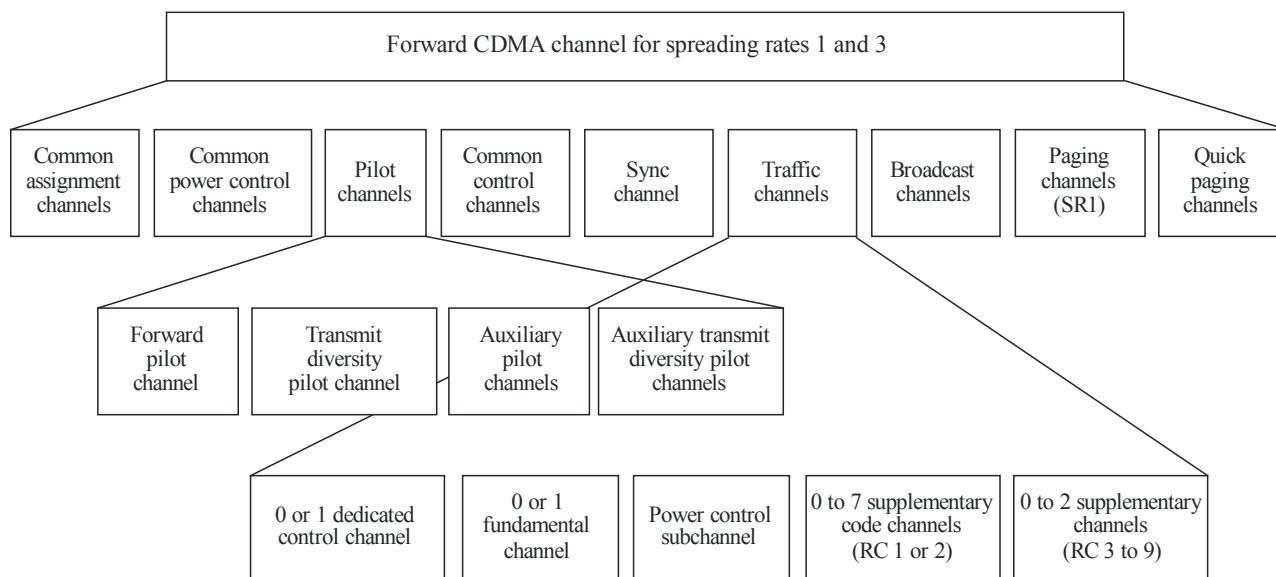
5.2.1.1.2.2 Forward Link (Downlink)

5.2.1.1.2.2.1 Radio Configurations 1 Through 9

Figure 22 shows the forward CDMA channels received at the mobile station. The forward pilot channel, the transmit diversity pilot channel, the auxiliary pilot channels, and the auxiliary transmit diversity pilot channels are unmodulated spread spectrum signals used for synchronization by a mobile station operating within the coverage area of the BS. The forward pilot channel is transmitted at all times by the BS on each active forward CDMA channel. The auxiliary pilot channel is transmitted in a beamforming application. The transmit diversity pilot channel and the auxiliary transmit diversity pilot channel are transmitted when transmit diversity is used. The sync channel is used by mobile stations operating within the coverage area of the BS to acquire initial time synchronization. The paging channel is used by the BS to transmit system overhead information and mobile station specific messages. The broadcast channel is used by the BS to transmit system overhead information. The quick paging channel is used by the BS to inform mobile stations, operating in the slotted mode while in the idle state, whether or not to receive the forward common control channel, the broadcast channel, or the paging channel. The common power control channel is used by the BS for transmitting common power control sub channels (one bit per subchannel) for the power control of multiple reverse common control channels and enhanced access channels. The common power control sub channels are time multiplexed on the common power control channel. Each common power control subchannel controls a reverse common control channel or an enhanced access channel. The common assignment channel is used by the BS to provide quick assignment of the reverse common control channel. The forward common control channel is used by the BS to transmit mobile station-specific messages. For radio configurations 1 and 2, the forward traffic channels include the forward fundamental channel and forward supplemental code channel. For radio configurations 3 through 9, the forward traffic channels include the forward dedicated control channel, forward fundamental channel, and forward supplemental channel. Similar to the corresponding reverse traffic channels, these channels are used for transmission of user and/or signalling information to a specific mobile station during a call. The forward traffic channels also include the forward power control subchannel. It is used to transmit reverse power control commands and is transmitted either on the forward fundamental channel or on the forward dedicated control channel.

The channel structure of the forward link is similar to that of the reverse link shown in Fig. 22, except that the sync channel and the paging channel do not use the frame quality indicator, and that the quick paging channel and the common power control channel do not use channel coding or interleaving. Block interleaving is used on the sync channel, the paging channels, the broadcast channel, the common assignment channel, the forward common control channel, and the forward traffic channels.

FIGURE 22
Forward CDMA channels received at the mobile station



M.1457-22

Figure 23 shows an example of scrambling, power control symbol puncturing, and demultiplexer structure for the forward traffic channels with radio configurations 3 through 9. The channel encoded and interleaved output symbols are scrambled by the long code. The power control symbols are punctured on the forward fundamental channel and forward dedicated control channel only. The DEMUX functions distribute the scrambled and punctured symbols sequentially from the top to the bottom, forming pairs of quadrature modulation symbols. When operating in SR 1 (1X) without transmit diversity (TD), each modulation symbol in a quadrature pair is spread by the appropriate Walsh or quasi-orthogonal function and is then spread by a quadrature pair of PN sequences at a fixed chip rate of 1.2288 Mchip/s. When operating in SR 1 (1X) with transmit diversity, each modulation symbol in two quadrature pairs is spread by the appropriate Walsh or quasi-orthogonal function and a quadrature pair of PN sequences to a chip rate of 1.2288 Mchip/s. Then the two quadrature pairs are transmitted on two separate antennas. When operating in the SR N multi-carrier mode, each modulation symbol in N quadrature pairs is spread by the appropriate Walsh or quasi-orthogonal function and a quadrature pair of PN sequences to a chip rate of 1.2288 Mchip/s. Then the N quadrature pairs are transmitted on N adjacent 1.25 MHz carriers. Figure 24 shows the downlink spreading and modulation for SR 1 (1X) without transmit diversity as an example, which also shows each downlink modulation carrier for SR N multi-carrier operation. The system described in this sub-section can be deployed as an overlay on up to N carriers of TIA/EIA-95-B family of systems. This system can also be deployed in clear spectrum.

The reverse traffic channels utilize an 800 Hz feedback power control mechanism similar to that for the forward traffic channel. In addition, the mobile station supports open loop power control.

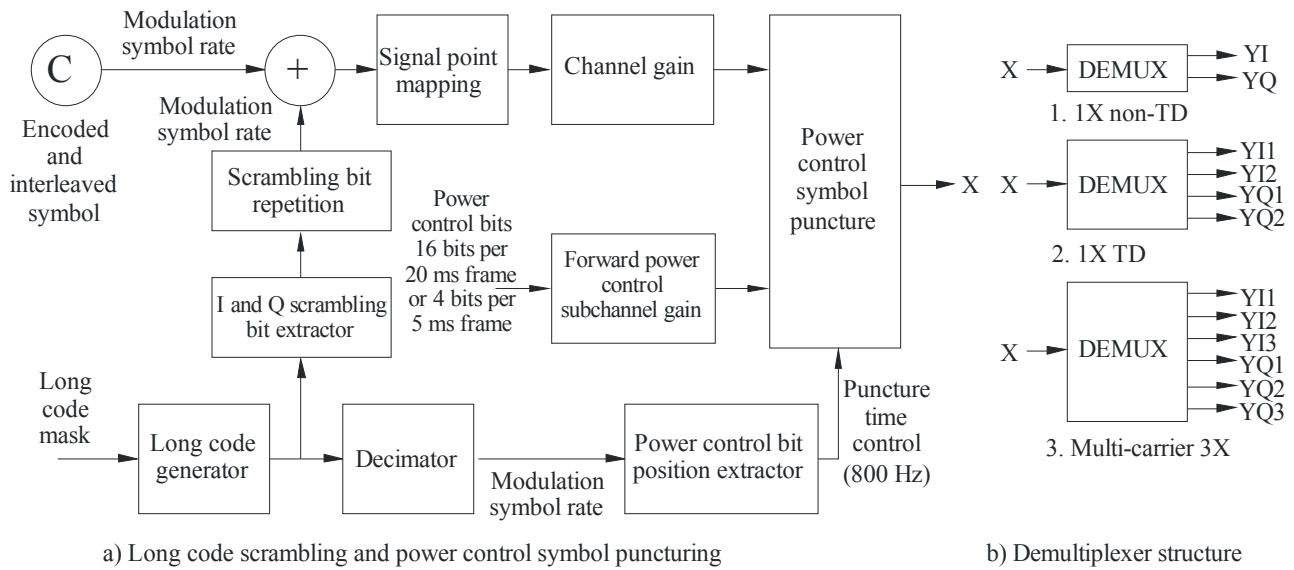
Downlink soft handoff is achieved by performing diversity combining at the mobile station. Transmit diversity is achieved by transmitting modulation symbols on separate transmit antennas or by transmitting separate carriers on separate antennas.

5.2.1.1.2.2.2 High Rate Packet Data Access

The High Rate Packet Data Access family of standards, also known as Evolution Data Optimized (EV-DO), provide full QoS and efficient support for a wide variety of applications, backward compatible multi-carrier support, broadcast/multicast, flexible duplex, and hybrid frequency reuse.

FIGURE 23

Example of scrambling, power control symbol puncturing and demultiplexing



M.1457-23

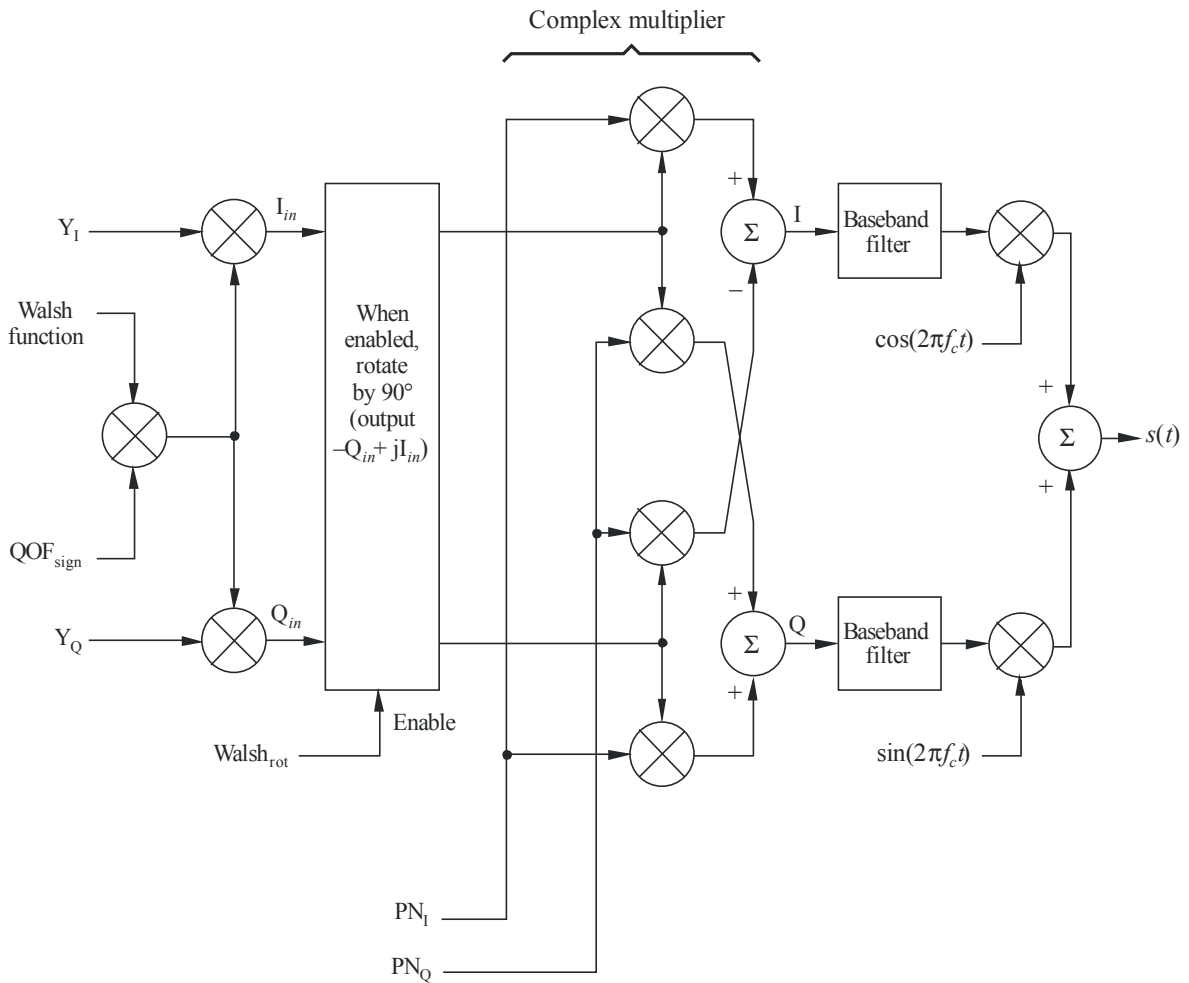
5.2.1.1.2.2.2.1 High Rate Packet Data Release 0 and Revision A

The Release 0 and Revision A standards deploy a Forward CDMA Channel on a dedicated 1X RF Channel. This Forward CDMA Channel consists of the following time-multiplexed channels: the Pilot Channel, the Forward Medium Access Control (MAC) Channel, the Control Channel and the Forward Traffic Channel as shown in Fig. 25. The Forward Traffic Channel carries user data packets. The Control Channel carries control messages, and it may also carry user traffic. Each channel is further decomposed into code-division-multiplexed quadrature Walsh channels.

The MAC Channel consists of two sub channels: the Reverse Power Control (RPC) Channel and the Reverse Activity (RA) Channel. The RA Channel transmits a reverse link activity bit (RAB) stream. In Release 0, each MAC Channel symbol is BPSK modulated on one of sixty-four 64-ary Walsh codewords. In Revision A, each MAC Channel symbol is BPSK or OOK modulated on the in-phase or quadrature-phase of one of 128 128-ary Walsh codewords.

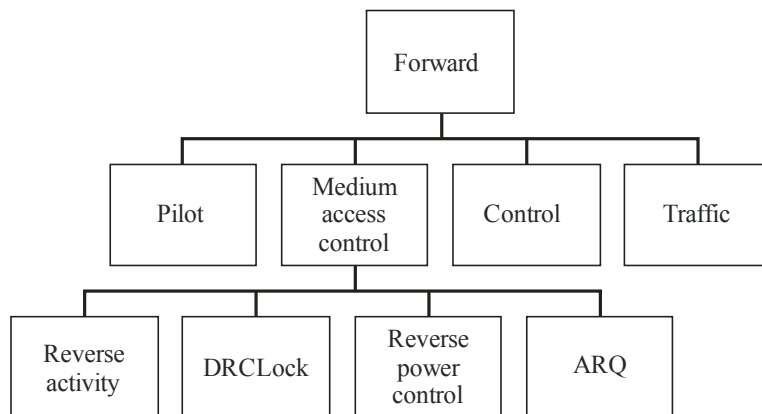
The Forward Traffic Channel is a packet-based, variable-rate channel. The user data for an access terminal is transmitted at a data rate that varies from 38.4 kbit/s to 2.4576 Mbit/s with Release 0 and from 38.4 kbit/s to 3.1 Mbit/s with Revision A.

FIGURE 24
Downlink spreading and modulation for 1X without transmit diversity



M.1457-24

FIGURE 25
Forward CDMA channel for high rate packet data access



M.1457-25

The Forward Traffic Channel and Control Channel data are encoded, scrambled and interleaved. The output of the channel interleaver is fed into a QPSK/8-PSK/16-QAM modulator. The modulated symbol sequences are repeated and punctured, as necessary. Then, the resulting sequences of modulation symbols are demultiplexed to form 16 pairs (in-phase and quadrature) of parallel streams. Each of the parallel streams are covered with a distinct 16-ary Walsh function at a chip rate to yield Walsh symbols at 76.8 ksymbol/s. The Walsh-coded symbols of all the streams are summed together to form a single in-phase stream and a single quadrature stream at a chip rate of 1.2288 Mchip/s. The resulting chips are time-division multiplexed with the preamble, Pilot Channel, and MAC Channel chips to form the resultant sequence of chips for the quadrature spreading operation.

Forward Traffic Channel physical layer packets can be transmitted in 1 to 16 slots. When more than one slot is allocated, the transmitted slots use a 4-slot interlacing. That is, the transmitted slots of a packet are separated by three intervening slots, and slots of other packets are transmitted in the slots between those transmit slots. If a positive acknowledgement is received on the reverse link ACK Channel that the physical layer packet has been received on the Forward Traffic Channel before all of the allocated slots have been transmitted, the remaining untransmitted slots are not transmitted and the next allocated slot is used for the first slot of the next physical layer packet transmission.

The Control Channel is transmitted at a data rate of 76.8 kbit/s or 38.4 kbit/s. The modulation characteristics for the Control Channel are the same as those of the Forward Traffic Channel transmitted at the corresponding rate.

5.2.1.1.2.2.2 High Rate Packet Data Revision B

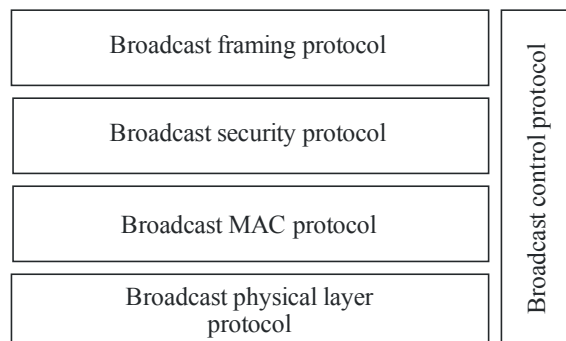
The High Rate Packet Data Revision B standard specifies a multi-carrier system with a bandwidth of up to 20 MHz. Each carrier is 1.25-MHz wide and terminals may support one or more carriers. Non-contiguous CDMA carrier operation is also supported. Revision B is compatible with Revision A systems, and Release 0 and Revision A terminals can operate on Revision B networks. The user data for an access terminal is transmitted at a data rate that varies from 38.4 kbit/s to 4.9152 Mbit/s for each 1.25-MHz carrier with the peak data rate achieved using 64-QAM modulation. The forward link peak data rate is therefore 73.7 Mbit/s.

5.2.1.1.2.2.2.3 Broadcast and Multicast Services (BCMCS)

The air interface of the high rate broadcast packet data system is comprised of a group of protocols that are collectively called the broadcast protocol suite. Figure 26 shows the protocols that comprise the broadcast protocol suite.

FIGURE 26

Broadcast protocol suite



The Broadcast Framing Protocol fragments higher layer packets at the access network and helps the access terminal in determining higher layer packet boundaries. The Broadcast Framing Protocol also validates the integrity of higher layer packets by discarding erroneous packets with very high probability. The Broadcast Security Protocol provides encryption of Framing Packets. The Broadcast MAC Protocol defines procedures used to transmit over the Broadcast Channel. The Broadcast MAC Protocol also provides forward error correction (FEC) and multiplexing to reduce the radio link error rate as seen by the higher layers. The Broadcast Physical Layer provides the channel structure for the Broadcast Channel. The Broadcast Control Protocol defines procedures used to control various aspects of the operation of the broadcast packet data system.

The framing protocol fragments higher layer packets and packs them into framing packets. The framing protocol helps the access terminal in determining higher layer packet boundaries. The broadcast system uses a segment-based framing protocol that has lower deframing complexity and requires a lower bandwidth expansion margin than octet-based HDLC-like framing.

Encryption of the broadcast content and distribution of decryption key only to authorized subscribers of the channel work to counter the threat of an unauthorized user getting free and convenient access to the broadcast content.

The Broadcast Security Protocol encrypts Framing packets to form Broadcast Security packets. The access network generates a Short Term Key and uses the AES (also known as Rijndael) encryption procedures to generate an encryption mask that is exclusive-ORed with the Framing packets. The Short Term Key, which changes frequently, is generated by running a hash function on a longer-term key called the Broadcast Access Key and a random number called RandomSeed. Each broadcast channel has its own Broadcast Access Key. The Broadcast Access Key is provisioned into secure memory in the access terminal when the user subscribes to the broadcast channel. The Broadcast Access Key is changed over a longer period, which is equivalent to the subscription period to the broadcast channel. All users that subscribe to a broadcast channel share the same Broadcast Access Key. The access network broadcasts RandomSeed in the clear along with the encrypted content.

The access terminal uses the RandomSeed received with the encrypted content and the Broadcast Access Key provisioned into secure memory to compute the Short Term Key. The access terminal then uses the Short Term Key to decrypt the broadcast content.

The Broadcast MAC Protocol receives packets from the Security Protocol and adds an outer code, which in conjunction with the Physical Layer Turbo code, forms a product code. A Reed-Solomon block code is used as the outer code. Multiple Reed-Solomon Error Control Blocks are multiplexed before transmission on the Physical Layer. Each Error Control Block is made of N octet rows and $125 \times M$ octet columns.

BCMCS uses the Reed-Solomon code as an erasure code (and not as an error-correcting code) because the Cyclic Redundancy Check (CRC) provided by the Physical Layer is used to detect and erase damaged Physical Layer packets. By relying on the CRC to provide error detection, the entire power of the Reed-Solomon code is used to recover erased octets. Also, erasure decoding is simpler than error correction because the position of the erased octets is known *a priori*.

The Broadcast Physical Channel is divided into several time-division-multiplexed sub-channels called interlace-multiplex pairs. An Error Control Block is transported as payload on one or more sub-channels of the Physical Layer. Thus, data from multiple Error Control Blocks is multiplexed onto the Broadcast Physical Channel. The Broadcast MAC Protocol provides the outer Reed-Solomon code, while the Physical Layer provides an inner Turbo code. Soft combining is allowed on the forward link during high speed broadcast service transmission because multiple sectors may transmit the same data.

5.2.1.1.2.2.2.4 Enhanced Broadcast and Multicast Services (E-BCMCS)

The E-BCMCS transmits an OFDM-based waveform within the High Rate Packet Data structure while maintaining the same MAC and upper-layer designs as the basic BCMCS. In the enhanced mode, broadcast data are transmitted from all sectors with identical PN spreading and they are combined at the receiver as virtual multipath components. The maximum supportable rates are on the order of 1.2 to 1.5 Mbit/s based on a typical deployment scenario with a site-to-site distance of 1.9 km over a transmission bandwidth of 1.25 MHz.

The OFDM broadcast symbols are punctured into the High Rate Packet Data slot formats without changing the legacy pilot and MAC portion of the slot structure.

In order to optimize the broadcast transmission efficiency for different deployment scenarios, different OFDM formats with different cyclic prefix lengths and numbers of pilot tones are specified. The OFDM mode with a longer cyclic prefix and more pilot tones can be deployed in a network with larger cell-to-cell distance or in a network with repeaters with large delays.

In order to support heterogeneous cell layouts with spatially non-uniform broadcast coverage, as well as to support acceptable coverage near the boundaries of broadcast areas, the access network may be configured so that different sectors broadcasting the same broadcast channel are allowed to use different transmit data rates within the same rate set. The transmission time of the first slot of each packet is synchronized across all sectors transmitting that broadcast channel. Subsequently, packets are early terminated after a different number of slots by different sectors, consistent with their transmission rates. The broadcast overhead message from each sector is used to specify the actual data rate of the broadcast channel. The access terminals attempt to decode the broadcast channel after each slot of transmission until the CRC passes, up to the data rate specified by the broadcast overhead message.

To enable HARQ, the High Rate Packet Data forward link is time division multiplexed into four interlaces, each with a duration of one slot. One or more interlaces can be occupied by different broadcast and multicast streams. This allows flexible distribution of the system resources among unicast and broadcast services.

Two OFDM formats and six rate sets are defined. The first format is designed to provide robust coverage even in a network with large repeater delays and severe adjacent channel interference, while the second OFDM format is designed with less overhead to provide higher data rates in networks without long repeater delays.

For each OFDM format, three different rate sets are defined with payload sizes ranging from 2 K to 5 K. Turbo coding is used for all the rate sets with a code rate of 1/3 for the 4 K and 5 K payload sizes and of 1/5 for the 2 K and 3 K payload sizes. The output of the Turbo channel encoder is scrambled to randomize the data prior to modulation. The scrambling sequence is generated by a 17-tap shift register with feedback. The initial seed depends on the rate set. The channel interleaver consists of a symbol-reordering stage and a matrix-interleaving stage. The interleaved sequence is then truncated/repeated to the map payload size into the OFDM transmission format. 16-QAM is used for modulation for all the rate sets. The guard tones and pilot tones are inserted according to the transmission format and staggering pattern. Frequency domain spreading is applied to randomize the pilots and data for different logic channels. The output sequence then goes through an IFFT engine and a cyclic prefix block.

5.2.1.1.2.2.3 Ultra Mobile Broadband System

The Ultra Mobile Broadband (UMB) system provides high peak data rates, good spectral efficiency, low latency, improved terminal battery life, and high capacity and enhanced user experience for delay-sensitive applications such as VoIP and video telephony.

The UMB system provides a unified design for full- and half-duplex FDD modes of operation with support for scalable bandwidths. The system is designed for robust mobile broadband access, and is optimized for high spectral efficiency and short latencies using advanced modulation, link adaptation, and multi-antenna transmission techniques. Fast handoff, fast power control, and inter-sector interference management are used. Adaptive coding and modulation with synchronous H-ARQ and turbo coding are used for achieving high spectral efficiencies. Sub-band scheduling provides enhanced performance on both the forward link by exploiting multi-user diversity gains for latency-sensitive traffic.

The forward link retransmission latency is approximately 5.5 ms and the peak data rate is over 260 Mbit/s in a 20-MHz bandwidth.

The system employs an orthogonal frequency division multiple access (OFDMA) forward link with support for multiple-input multiple-output (MIMO) and spatial division multiple access (SDMA) antenna techniques. The system employs fast access with reduced overhead and fast requests. Efficient handoff support is also provided. The system employs beacons for early detection of in-band and out-of-band carrier for improved sector detection in single carrier or multi-carrier deployments.

5.2.1.1.3 Layer 2 – MAC

5.2.1.1.3.1 Introduction

The MAC sub-layer provides the following important functions:

- Best effort delivery – reasonably reliable transmission over the radio link with a RLP that provides a “best effort” level of reliability.
- Rules governing access terminal transmission timing, power characteristics, and rate selection on the Access Channel.
- Rate control on both uplink and downlink traffic channels.
- Multiplexing and QoS control – enforcement of negotiated QoS levels by mediating conflicting requests from competing services and the appropriate prioritization of access requests.

5.2.1.1.3.2 Layering structure and entities

The layering structure of this radio interface is shown in Fig. 27.

5.2.1.1.4 Layer 2 – LAC

The LAC sub-layer performs the following important functions:

- Delivery of SDUs to Layer 3 entity using ARQ techniques, when needed, to provide reliability.
- Building and validating well-formed PDUs appropriate for carrying the SDUs.
- Segmentation of encapsulated PDUs into LAC PDU fragments of sizes suitable for transfer by the MAC Sub-layer and re-assembly of LAC PDU fragments into encapsulated PDUs.
- Access control through global challenge authentication. Conceptually, some messages failing authentication on a common channel should not be delivered to the upper layers for processing.
- Address control for delivery of PDUs based on addresses that identify particular mobile stations.

As a generated or received data unit traverses the protocol stack, it is processed by various protocol sub-layers in sequence. Each sub-layer processes only specific fields of the data unit that are associated with the sub-layer-defined functionality. The general processing of data units by the LAC sub-layer and its sub-layers is shown in Fig. 28. The LAC sub-layer provides services to Layer 3 in the data plane. SDUs are passed between Layer 3 and the LAC sub-layer. The LAC sub-layer provides the proper encapsulation of the SDUs into LAC PDUs, which are subject to segmentation and re-assembly and are transferred as LAC PDU fragments to the MAC sub-layer.

FIGURE 27
Layering structure and service interfaces (Mobile stations)

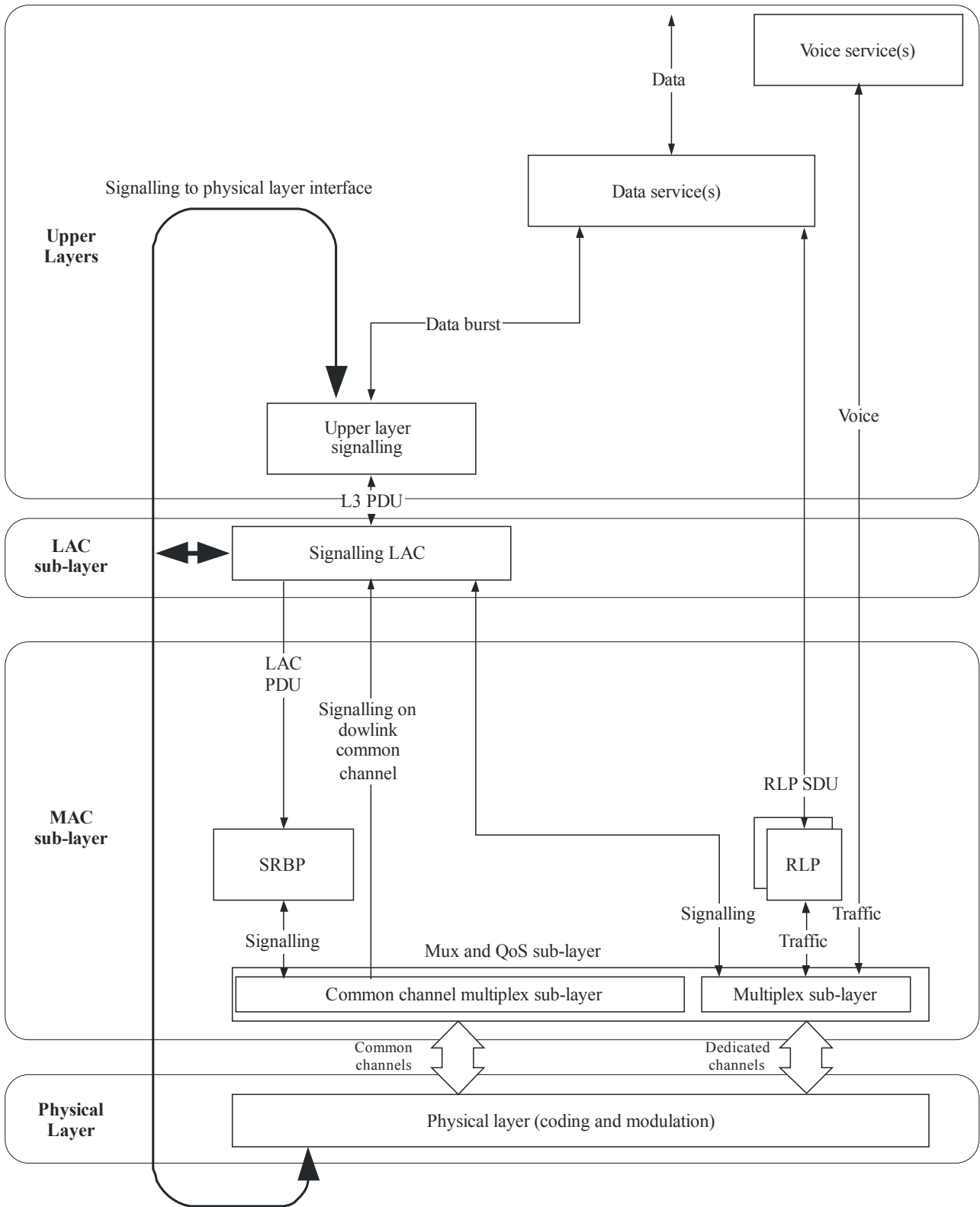
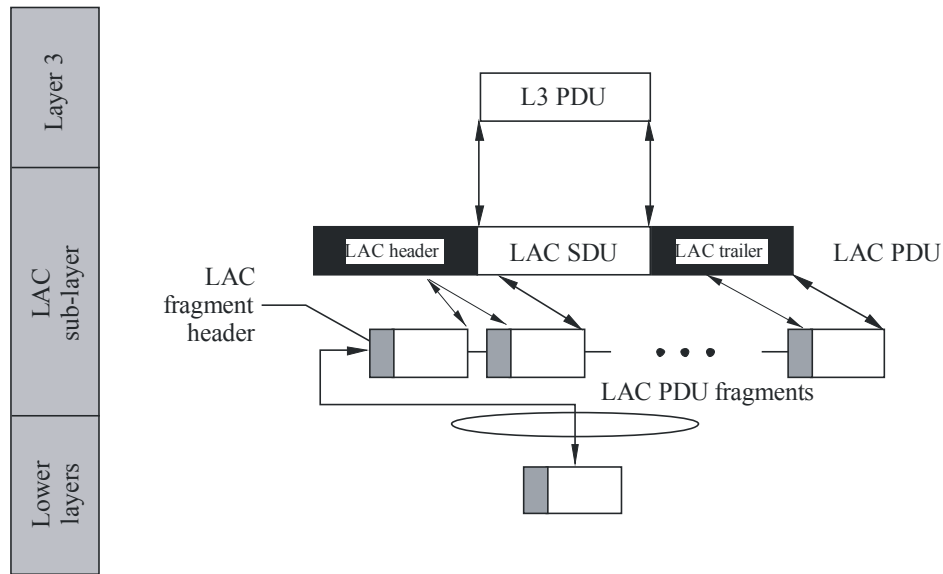


FIGURE 28
LAC data unit processing



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In the data plane, Layer 3 and the LAC sub-layer send and receive signalling information on *logical channels*, thus avoiding the need to be sensitive to the radio characteristics of the physical channels. The system described in this sub-section uses the following types of logical channel to carry signalling information:

- f-csch/r-csch (forward and reverse common signalling channel, respectively),
- f-dsch/r-dsch (forward and reverse dedicated signalling channel, respectively).

Logical channels are defined for the purposes of synchronization, broadcast, general signalling, access, and dedicated signalling. Multiple instances of the same logical channel may be deployed. Figures 29 and 30 show the logical channels on the forward and reverse links, respectively.

FIGURE 29
Downlink logical channel architecture

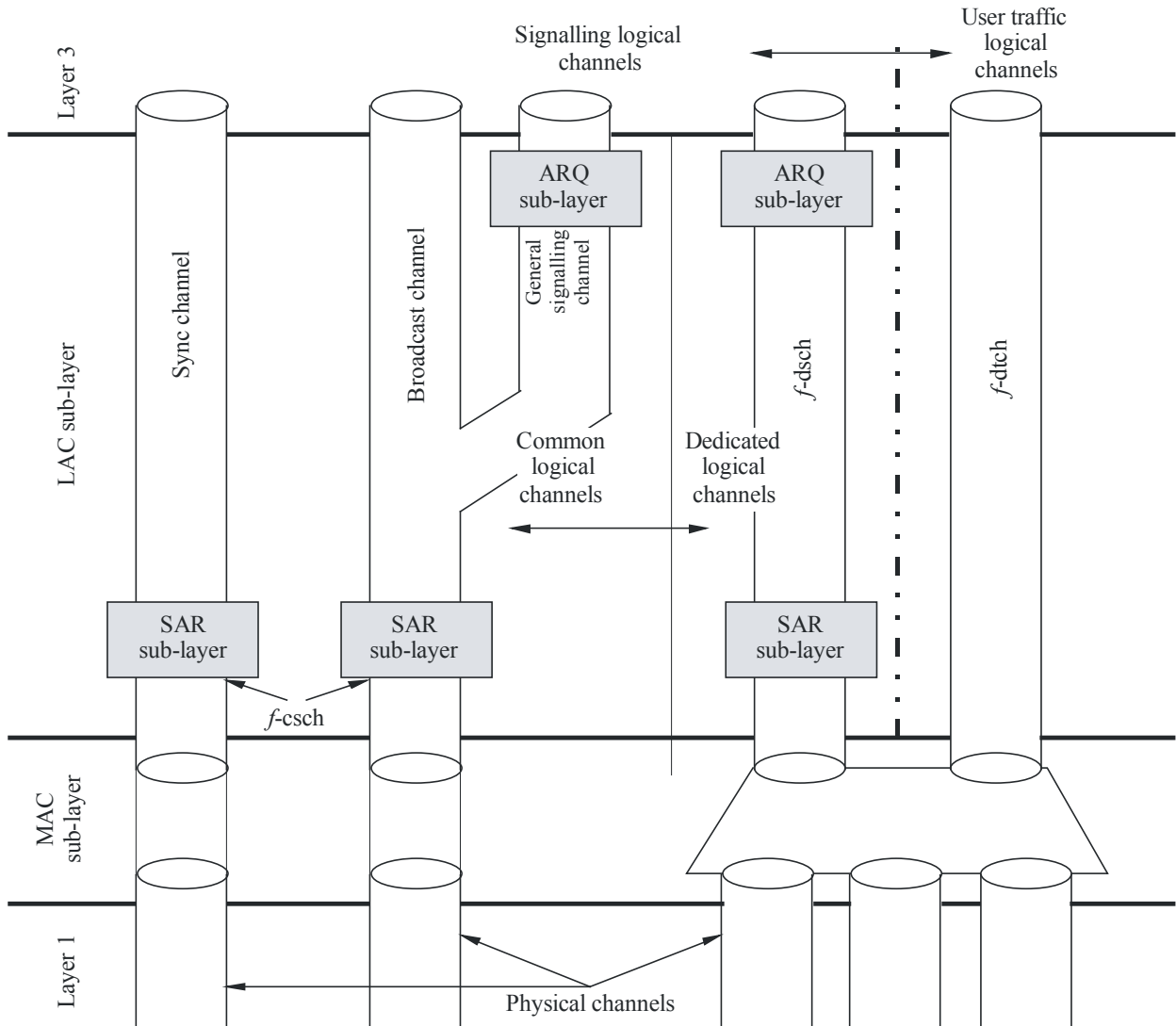
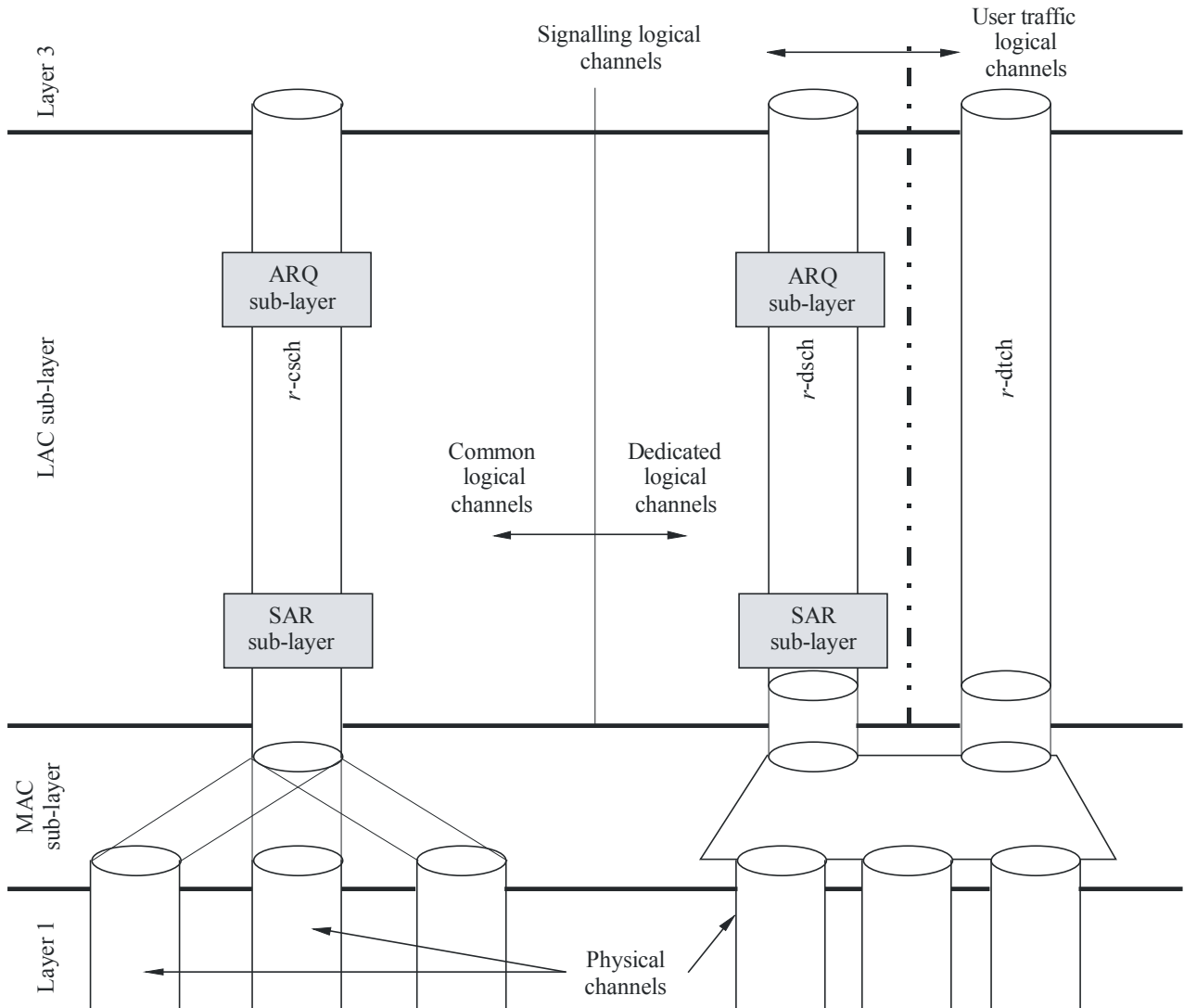


FIGURE 30
Uplink logical channel architecture



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5.2.1.1.5 Layer 3 signalling

Layer 3 signalling provides a flexible structure designed to support a wide range of radio interface signalling alternatives:

- backward compatible to TIA/EIA-95-B Layer 3 signalling in the IS-2000 mode;
- the native upper layer signalling for this radio interface; and
- other existing or future upper layer signalling entities.

In addition to supporting the standard cellular and PCS features, Layer 3 signalling also supports the following radio related features and capabilities:

- Radio configuration negotiation
- Quick paging operation (to improve battery life)
- Handoff capabilities (i.e. soft handoff, hard handoff, idle handoff, access probe handoff, and access handoff)
- Power control
- High-speed data
- Enhanced access
- Broadcast control operation
- Auxiliary pilot support, and
- MAC state transitions.

5.2.1.1.6 Summary of major technical parameters

CDMA-MC FDD Parameter	Value	Reference to § 5.2.2
Multiple access technique and duplexing scheme	Multiple access technique: CDMA, TDMA, OFDM, OFDMA Duplexing scheme: Full Duplex FDD, Half Duplex FDD	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Chip rate and bandwidth	$N \times 1.2288$ Mchip/s (currently $N = 1$ and 3 is specified, and N can be easily extended to $N = 6, 9, 12$) HRPD Rev. B: M carriers of 1.2288 Mchip/s can be aggregated in a multi-carrier operation, where $M = 2, 3, 4, \dots, 15$ UMB System: Native bandwidth can fit deployment of 1.25 to 20 MHz ($M \times 1.2288 - N \times 0.1536$ MHz, $M = 1, 2, 4, 8, 16$, $N = 0, \dots, M \times 4 - 1$) Multi-carrier configurations can be used to aggregate two or more carriers of possibly different native bandwidths and operating in non-contiguous spectral allocation	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Inter-BS asynchronous/synchronous operation	Synchronous and Asynchronous operation supported in UMB. Synchronous operation is supported in cdma2000, and HRPD	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Pilot structure	Code division dedicated pilot, frequency domain dedicated pilot (UL); code division common pilot; code division common or dedicated auxiliary pilot; frequency domain common or dedicated pilot; time division common pilot (DL)	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Frame length and interleaving	~ 0.91 to ~ 1.07 , $5, 10, 20, \sim 23.70$ to $\sim 27.76, \sim 26.67, 40$, 80 ms frame and channel interleaving	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Modulation and detection	Data modulation: BPSK; QPSK, 8-PSK, 16-QAM and 64-QAM Spreading modulation: HPSK (UL); QPSK (DL) Detection: Pilot aided coherent detection	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79

CDMA-MC FDD Parameter	Value	Reference to § 5.2.2
Channelization code	Walsh codes and PN spreading codes (UL) Walsh codes, PN spreading codes, or quasi-orthogonal codes (DL)	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Scrambling (spreading) code	Long code, short PN code, and other pseudo-random codes	5.2.2.1.1.2, 5.2.2.1.1.23 and 5.2.2.1.1.54
Channel coding	Convolutional code with $K = 9$, $R = 1/2$, $1/3$, $1/4$ or $1/6$ base code rates; Turbo code with $K = 4$, $R = 2/3$, $1/2$, $1/3$, $1/4$ or $1/5$ base code rates	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Access scheme (uplink)	Basic (random) access; power controlled access; reservation access; or designated access	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79
Power control	Open loop Closed loop (800, 600, 150, 50 or $274/N$ Hz update rate, $N = 1, 2, 4, 8$) Power control steps: $0.25 \times N$, $N = 1, 2, 3, \dots, 8$ dB	5.2.2.1.1.2, 5.2.2.1.1.23, 5.2.2.1.1.54 and 5.2.2.1.1.79

5.2.1.2 TDD Component

5.2.1.2.1 Introduction

The IMT-2000 radio interface specifications for UMB TDD in CDMA multi-carrier (MC) technology are developed by a partnership of SDOs (see Note 1). This radio interface is called cdma2000.

NOTE 1 – Currently, these specifications are developed within the third generation partnership project 2 (3GPP2), where the participating SDOs are ARIB, CCSA, TTA and TTC.

In the development of this radio interface the CN specifications are based on an evolved ANSI-41 and IP network, but the specifications include the necessary capabilities for operation with an evolved GSM-MAP-based CN or a CN based on IETF protocols.

This radio interface is a wideband spread spectrum radio interface that utilizes CDMA/OFDMA technology in order to meet the needs of the 3G wireless communication systems and to meet the requirements for the 3G evolution of the current 2G TTA/EIA-95-B family of standards.

This radio interface has a layered structure that provides a combination of voice, packet data, and circuit data services, according to the ISO/OSI reference model (i.e. Layer 1 – the physical layer, and Layer 2 – the link layer). Layer 2 is further subdivided into the link access control (LAC) sub-layer and the MAC sub-layer. Applications and upper layer protocols corresponding to OSI Layers 3 through 7 utilize the services provided by the LAC services, e.g. signalling services, voice services, data services (packet data and circuit data).

In this radio interface a generalized multimedia service model is supported. This allows any combination of voice, packet data, and circuit data services to be operated. The radio interface also includes a QoS control mechanism to balance the varying QoS requirements of multiple concurrent services (e.g. to support ISDN or RSVP network layer QoS capabilities).

The radio interface supports a class of operational band plans as specified in the C.S0057 standard.

This family of standards supports multi-carrier systems in contiguous and non-contiguous operation with two or more carriers each with bandwidths of up to 20 MHz.

This specification includes a flexible and efficient MAC sub-layer that supports multiple data service state machine instances, one for each active packet or circuit data service instance. Along with the multiplexing QoS control entity, the MAC realizes the complex multimedia, multi-service capabilities of 3G wireless systems with QoS management capabilities for each active service.

This specification also introduces a LAC sub-layer to provide reliable transmission over the air for signalling services. To provide flexible voice services, this radio interface provides the framework and the services to transport encoded voice data in the form of packet data or circuit data traffic. The LAC sub-layer provides an ARQ (retransmission) protocol.

5.2.1.2.2 Physical layer

5.2.1.2.2.1 Reverse link (uplink)

5.2.1.2.2.1.1 Ultra Mobile Broadband (UMB) System

The UMB system provides high peak data rates, good spectral efficiency, low latency, improved terminal battery life, high capacity and enhanced user experience for delay-sensitive applications such as VoIP and video telephony.

The UMB system provides multiple TDD duplexing modes, namely symmetric DL:UL partitioning (1:1), asymmetric partitioning options 5:3, 3:1, and 3:5, all with support for scalable bandwidths. UMB TDD also allows for co-existence between various pairs of duplexing modes within the same contiguous deployment. The system is designed for robust mobile broadband access, and is optimized for high spectral efficiency and short latencies using advanced modulation, link adaptation, and multi-antenna transmission techniques. Fast handoff, fast power control, and inter-sector interference management are used. Adaptive coding and modulation with synchronous H-ARQ and turbo coding are used for achieving high spectral efficiencies. Sub-band scheduling provides enhanced performance on the reverse link by exploiting multi-user diversity gains for latency-sensitive traffic. The reverse link retransmission latency is approximately 7 ms and the peak data rate is over 70 Mbit/s in a 20-MHz bandwidth.

The reverse link is quasi-orthogonal. That is, it employs orthogonal transmission based on OFDMA, together with non-orthogonal user multiplexing with layered superposition or multiple receive antennas (SDMA). The reverse link also includes optional CDMA transmission for low-rate traffic. Interference management is obtained through fractional frequency reuse. An optimized throughput/fairness tradeoff is obtained through distributed power control based on other-cell interference. The reverse link employs a CDMA control segment and OFDMA control segments. The system employs fast access with reduced overhead and fast requests. The reverse link employs a broadband reference signal for power control, handoff decisions, and subband scheduling. Efficient handoff support is also provided.

5.2.1.2.2.2 Forward Link (Downlink)

5.2.1.2.2.2.1 Ultra Mobile Broadband (UMB) System

The UMB system provides high peak data rates, good spectral efficiency, low latency, improved terminal battery life, and high capacity and enhanced user experience for delay-sensitive applications such as VoIP and video telephony.

The UMB system provides multiple TDD duplexing modes, namely symmetric DL:UL partitioning (1:1), asymmetric partitioning options 5:3, 3:1, and 3:5, all with support for scalable bandwidths. UMB TDD also allows for co-existence between various pairs of duplexing modes within the same contiguous deployment. The system is designed for robust mobile broadband access, and is optimized for high spectral efficiency and short latencies using advanced modulation, link adaptation, and multi-antenna transmission techniques. Fast handoff, fast power control, and inter-sector interference management are used. Adaptive coding and modulation with synchronous H-ARQ and turbo coding are used for achieving high spectral efficiencies. Sub-band scheduling provides enhanced performance on both the forward link by exploiting multi-user diversity gains for latency-sensitive traffic.

The forward link retransmission latency is approximately 5.5 ms and the peak data rate is over 260 Mbit/s in a 20 MHz bandwidth.

The system employs an Orthogonal Frequency Division Multiple Access (OFDMA) forward link with support for multiple-input multiple-output (MIMO) and spatial division multiple access (SDMA) antenna techniques. The system employs fast access with reduced overhead and fast requests. Efficient handoff support is also provided. The system employs beacons for early detection of in-band and out-of-band carrier for improved sector detection in single carrier or multi-carrier deployments.

5.2.1.2.3 Layer 2 – MAC

5.2.1.2.3.1 Introduction

The MAC sub-layer provides the following important functions:

- Best effort delivery – reasonably reliable transmission over the radio link with a RLP that provides a “best effort” level of reliability.
- Rules governing access terminal transmission timing, power characteristics, and rate selection on the Access Channel.
- Rate control on both uplink and downlink traffic channels.
- Multiplexing and QoS control – enforcement of negotiated QoS levels by mediating conflicting requests from competing services and the appropriate prioritization of access requests.

5.2.1.2.3.2 Layering structure and entities

The layering structure of this radio interface is shown in Fig. 31.

5.2.1.2.4 Layer 2 – LAC

The LAC sub-layer performs the following important functions:

- Delivery of SDUs to Layer 3 entity using ARQ techniques, when needed, to provide reliability.
- Building and validating well-formed PDUs appropriate for carrying the SDUs.
- Segmentation of encapsulated PDUs into LAC PDU fragments of sizes suitable for transfer by the MAC Sub-layer and re-assembly of LAC PDU fragments into encapsulated PDUs.
- Access control through global challenge authentication. Conceptually, some messages failing authentication on a common channel should not be delivered to the upper layers for processing.
- Address control for delivery of PDUs based on addresses that identify particular mobile stations.

As a generated or received data unit traverses the protocol stack, it is processed by various protocol sub-layers in sequence. Each sub-layer processes only specific fields of the data unit that are associated with the sub-layer-defined functionality. The general processing of data units by the LAC sub-layer and its sub-layers is shown in Fig. 32. The LAC sub-layer provides services to Layer 3 in the data plane. SDUs are passed between Layer 3 and the LAC sub-layer. The LAC sub-layer provides the proper encapsulation of the SDUs into LAC PDUs, which are subject to segmentation and re-assembly and are transferred as LAC PDU fragments to the MAC sub-layer.

FIGURE 31
Layering structure and service interfaces (Mobile stations)

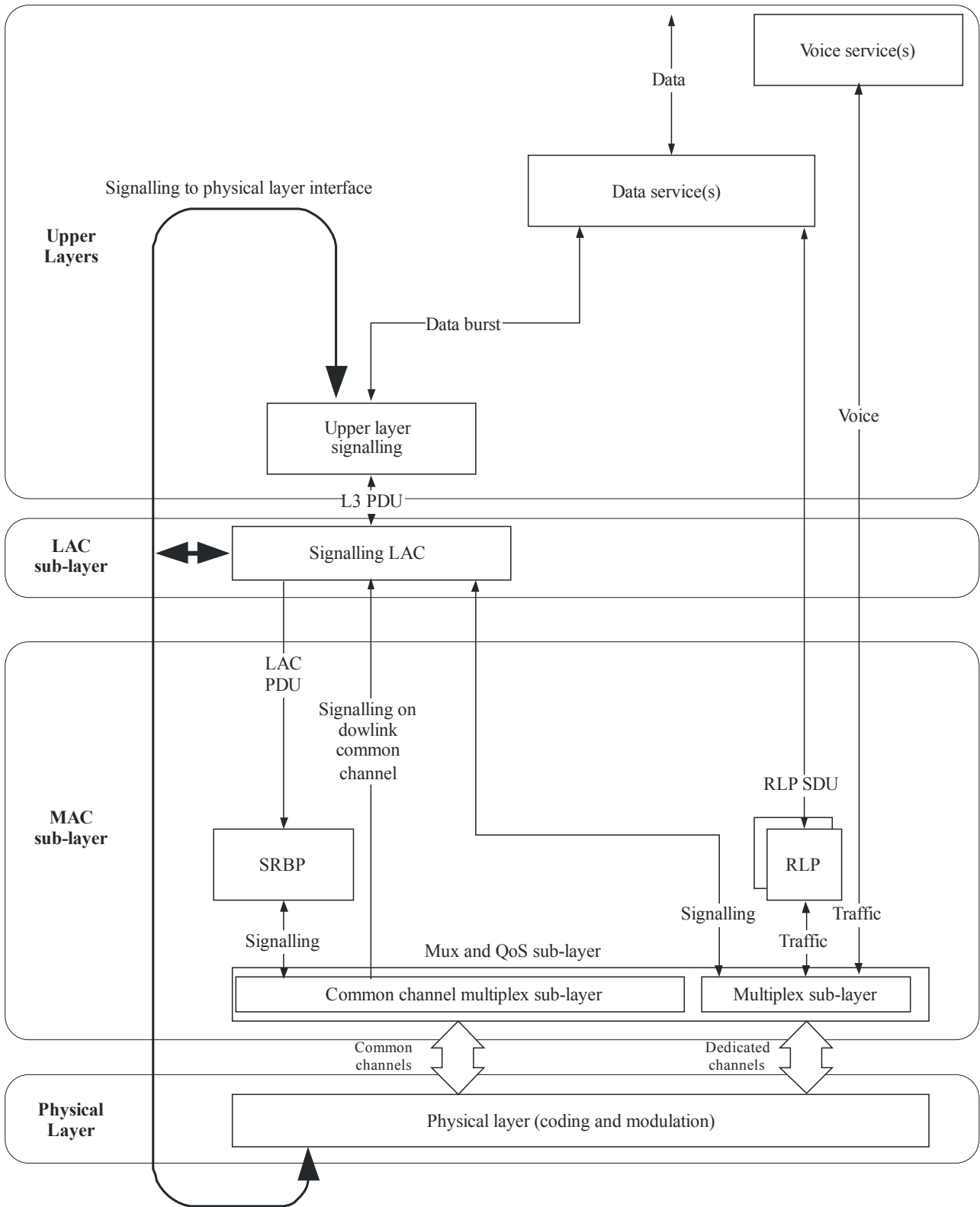
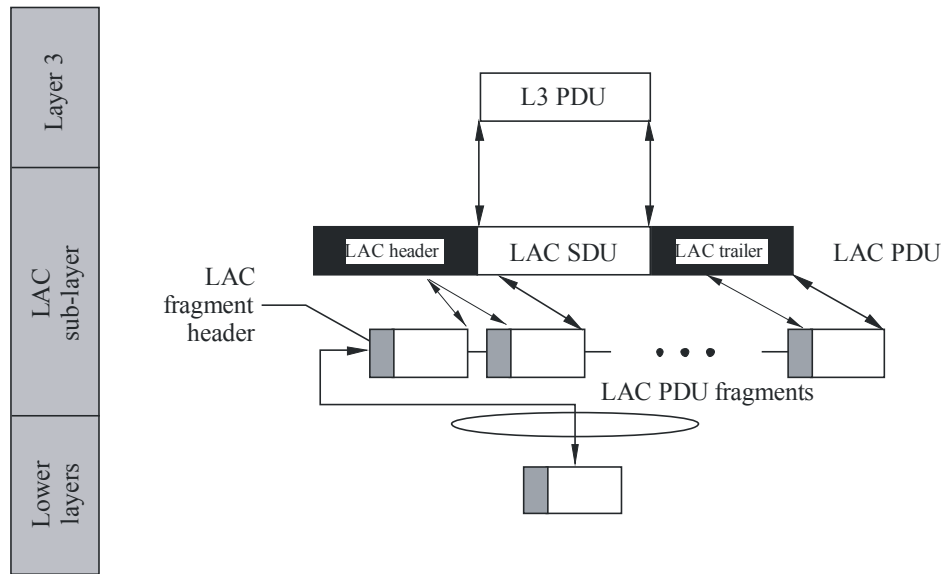


FIGURE 32
LAC data unit processing



M.1457-32

In the data plane, Layer 3 and the LAC sub-layer send and receive signalling information on *logical channels*, thus avoiding the need to be sensitive to the radio characteristics of the physical channels. The system described in this sub-section uses the following types of logical channel to carry signalling information:

- f-csch/r-csch (forward and reverse common signalling channel, respectively);
- f-dsch/r-dsch (forward and reverse dedicated signalling channel, respectively).

Logical channels are defined for the purposes of synchronization, broadcast, general signalling, access, and dedicated signalling. Multiple instances of the same logical channel may be deployed. Figures 33 and 34 show the logical channels on the forward and reverse links, respectively.

FIGURE 33
Downlink logical channel architecture

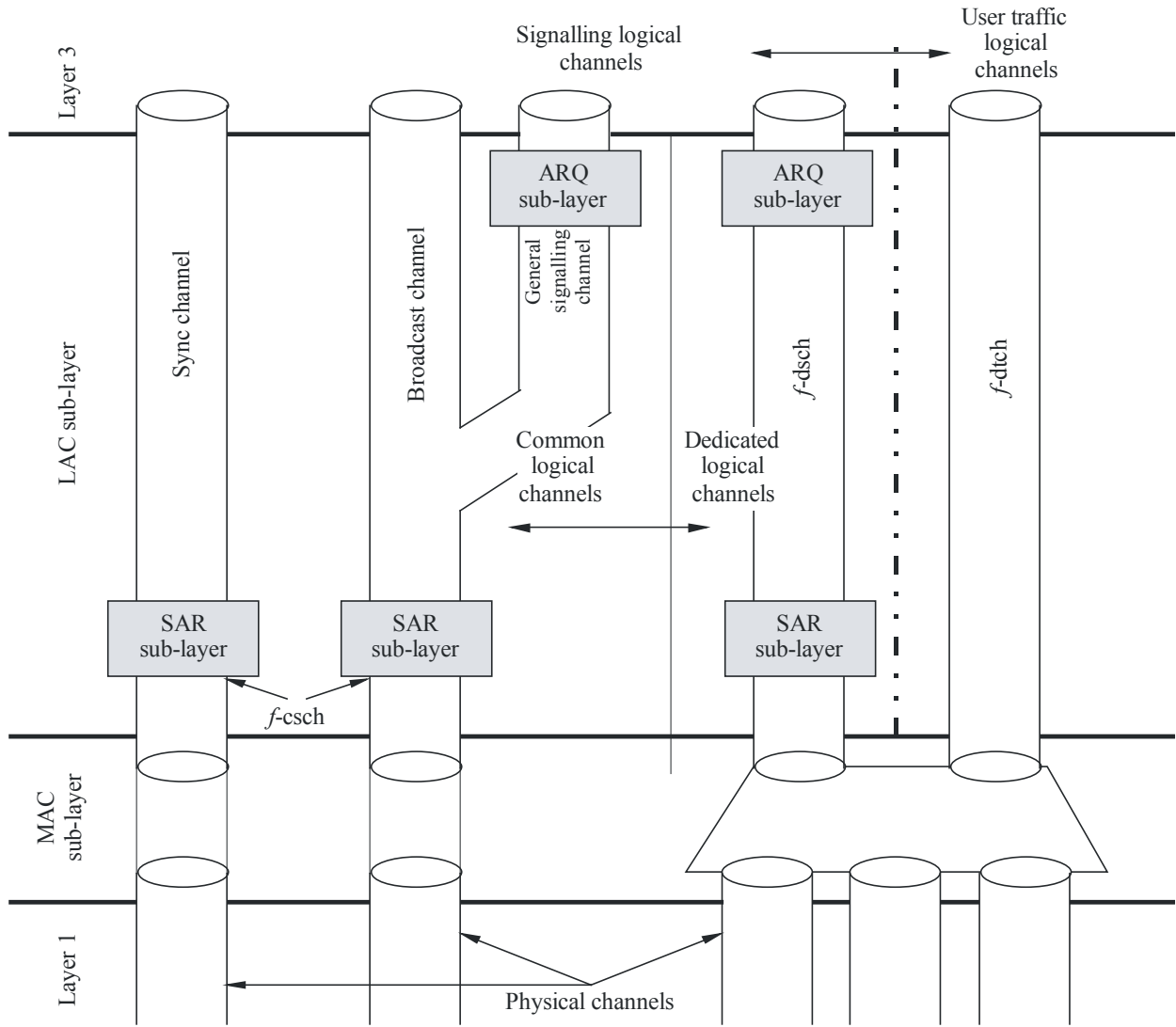
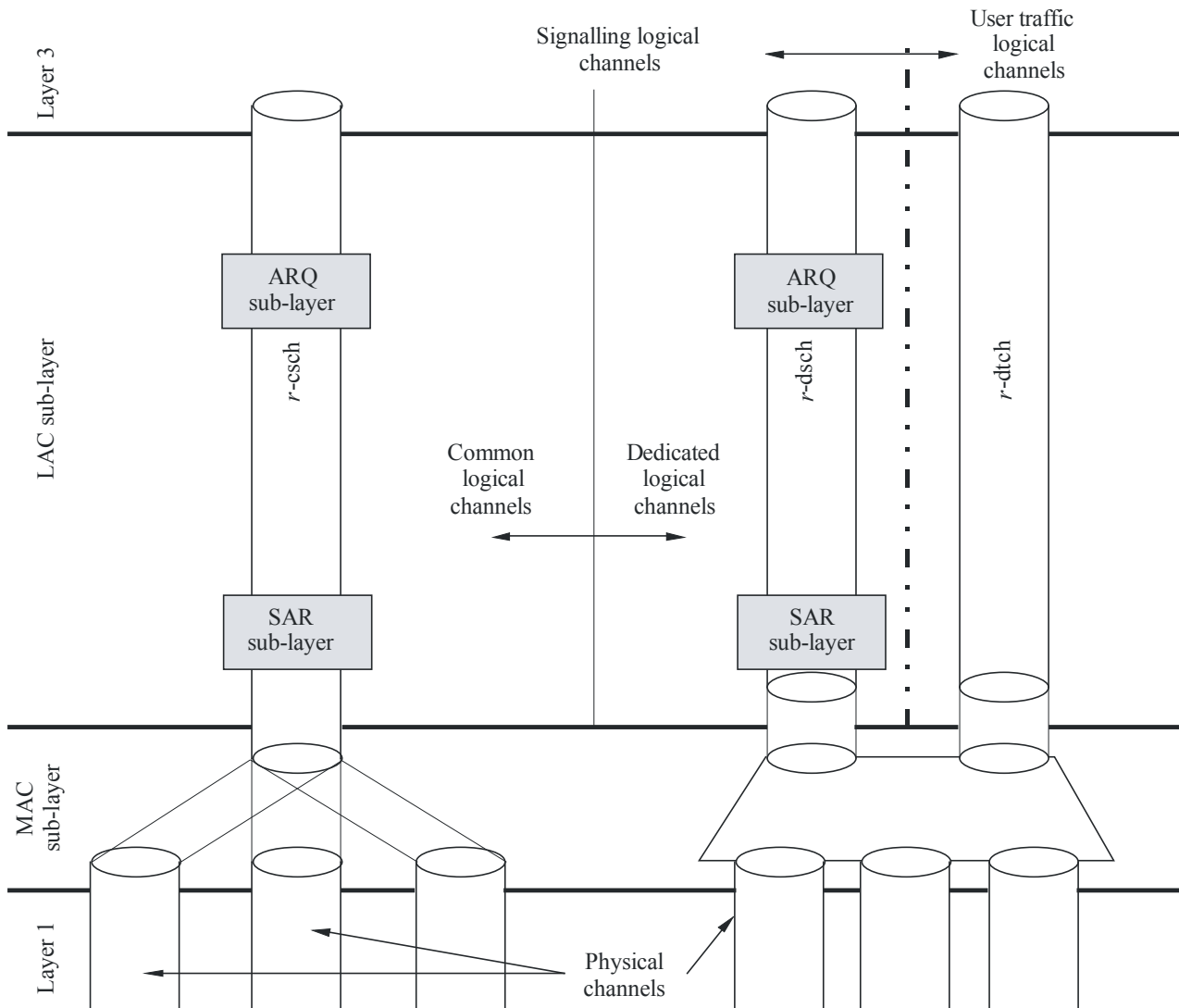


FIGURE 34
Uplink logical channel architecture



M.1457-34

5.2.1.2.5 Layer 3 signalling

Layer 3 signalling provides a flexible structure designed to support a wide range of radio interface signalling alternatives:

- the native upper layer signalling for this radio interface;
- other existing or future upper layer signalling entities.

In addition to supporting the standard cellular and PCS features, Layer 3 signalling also supports the following radio related features and capabilities:

- Radio configuration negotiation
- Quick paging operation (to improve battery life)
- Handoff capabilities (i.e. soft handoff, hard handoff, idle handoff, access probe handoff, and access handoff)
- Power control

- High-speed data
- Enhanced access
- Broadcast control operation
- Auxiliary pilot support
- MAC state transitions.

5.2.1.2.6 Summary of Major Technical Parameters

CDMA-MC TDD Parameter	Value	Reference to § 5.2.2
Multiple access technique and duplexing scheme	Multiple access technique: CDMA, OFDM, OFDMA Duplexing scheme: TDD duplexing options (DL:UL) are 1:1, 5:3, 3:1 and 3:5	5.2.2.2.1.58
Chip rate and bandwidth	Native bandwidth can fit deployment of 5 to 20 MHz ($M \times 4.9152 - N \times 0.1536$ MHz, $M = 1, 2, 4$, $N = 0, \dots, M \times 16 - 1$). Multi-carrier configurations can be used to aggregate two or more carriers of possibly different native bandwidths and operating in non-contiguous spectral allocation	5.2.2.2.1.58
Inter-BS asynchronous/synchronous operation	Synchronous operation is supported in UMB TDD	5.2.2.2.1.58
Pilot structure	Code division dedicated pilot, frequency domain dedicated pilot (UL); code division common pilot, code division common or dedicated auxiliary pilot; frequency domain common or dedicated pilot, time division common pilot (DL)	5.2.2.2.1.58
Frame length and interleaving	~0.91 to ~1.07, 23.07, 24.37, 25.67, 26.98 ms frame and channel interleaving	5.2.2.2.1.58
Modulation and detection	Data modulation: BPSK; QPSK, 8-PSK, 16-QAM, 64-QAM Spreading modulation: HPSK (UL); QPSK (DL) Detection: Pilot aided coherent detection	5.2.2.2.1.58
Channelization code	Walsh codes and PN spreading codes (UL) Walsh codes, PN spreading codes, or quasi-orthogonal codes (DL)	5.2.2.2.1.58
Scrambling (spreading) code	Long code, short PN code, and other pseudo-random codes	5.2.2.2.1.58
Channel coding	Convolutional code with $K = 9$, $R = 1/2, 1/3, 1/4$, or $1/6$ base code rates; Turbo code with $K = 4$, $R = 2/3, 1/2, 1/3, 1/4$, or $1/5$ base code rates	5.2.2.2.1.58
Access scheme (uplink)	Basic (random) access; power controlled access; reservation access; or designated access	5.2.2.2.1.58
Power control	Open loop Closed loop (800, 600, 150, 50, or $274/N$ Hz update rate, $N = 1, 2, 4, 8$) Power control steps: $0.25 \times N$, $N = 1, 2, 3, \dots, 8$ dB	5.2.2.2.1.58

5.2.2 Detailed specification of the radio interface

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at <http://ties.itu.int/u/itu-r/ede/rsg5/IMT-2000/GCS/GCSrev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their Web site.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

5.2.2.1

FDD Component

5.2.2.1.1

cdma2000® radio aspects specifications

5.2.2.1.1.1 C.S0001

Introduction to cdma2000 Spread Spectrum Systems

This volume provides an overview of cdma2000 standards. The general architecture of cdma2000 and its relation to TIA/EIA-95-B family of standards is described. This volume also defines some common aspects such as channel naming convention used in the standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
ARIB	ARIB STD-T64-C.S0001-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
Revision A					
ARIB	ARIB STD-T64-C.S0001-A v5.0	5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0001-A	5.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.1-A-2	A	Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0001-A v5.0	5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0001-A v5.0
Revision B					
ARIB	ARIB STD-T64-C.S0001-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0001-B	1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAE.3G-C.S0001-B	1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0001-B
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ARIB	ARIB STD-T64-C.S0001-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
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TIA	TIA/EIA/IS-2000.1-C	C	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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TIA	TIA-2000.1-C-1[E]	C	Published	Jun 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

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ARIB	ARIB STD-T64-C.S0001-D v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TIA	TIA-2000.1-D	D	Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0001-D v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0001-D v2.0

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TIA	TIA-2000.1-D-1[E]	D	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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5.2.2.1.1.2 C.S0002**Physical layer standard for cdma2000 Spread Spectrum Systems**

This volume defines the physical layer of the cdma2000 standard, including the requirements for the mobile station and the BS CDMA operation. Section 1 defines the terms and numeric indications used in this document. This section also describes the time reference used in the CDMA system and the tolerances used throughout the document. Section 2 describes the physical layer requirements for mobile stations operating in the CDMA mode. Section 3 describes the requirements for CDMA base stations.

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Revision 0					
ARIB	ARIB STD-T64-C.S0002-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
Revision A					
ARIB	ARIB STD-T64-C.S0002-A v6.0	6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0002-A	6.0	Published	Feb 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.2-A-2	A	Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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ARIB	ARIB STD-T64-C.S0002-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0002-B	1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.2-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0002-B v1.0	1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0002-B v1.0
Revision C					
ARIB	ARIB STD-T64-C.S0002-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0002-C	2.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.2-C	C	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0002-C v2.0	2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0002-C v2.0
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TIA	TIA-2000.2-C-1[E]	C	Published	Jun 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision D					
ARIB	ARIB STD-T64-C.S0002-D v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TIA	TIA-2000.2-D	D	Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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TIA	TIA-2000.2-D-1[E]	D	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.3 C.S0003

Medium access control (MAC) standard for cdma2000 Spread Spectrum Systems

This volume provides the detailed definitions of all component entities within the cdma2000 MAC layer, the service interfaces and primitives exchanged between entities within the MAC layer, and the service interfaces and primitives exchanged between the MAC layer and other cdma2000 layers. Section 1 contains the definitions of terms and an overview of this standard. Section 2 defines the normative behavior of the cdma2000 MAC sub-layer by describing the precise processing rules for each of the MAC sub-layer entities. Section 3 describes the service interfaces between the MAC sub-layer and other entities that are defined outside of this standards document (i.e. upper layer signalling and the physical layer). Section 4 contains a set of informative flow diagrams, which demonstrate the steps that the mobile station and the BS have to follow to make certain state transitions.

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Revision 0					
ARIB	ARIB STD-T64-C.S0003-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
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TIA	TIA/EIA/IS-2000.3-A-2	A	Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0003-A v6.0	6.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0003-A v6.0
Revision B					
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TIA	TIA/EIA/IS-2000.3-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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5.2.2.1.1.4 C.S0004

Signalling link access control (LAC) standard for cdma2000 Spread Spectrum Systems

This volume describes the LAC signalling protocol architecture and functionality used to provide the transport and delivery of Layer 3 signalling messages over cdma2000 radio channels. Section 1 defines the terms and numeric information used in this standard. Section 2 describes the requirements for cdma2000 mobile stations. Section 3 describes the requirements for cdma2000 BSs. Annex A describes the architectural and functional model used to develop cdma2000 LAC signalling. Annex B contains tables that give specific values for the constant identifiers found in Section 2 and Section 3.

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ARIB	ARIB STD-T64-C.S0004-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
Revision A					
ARIB	ARIB STD-T64-C.S0004-A v6.0	6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
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TIA	TIA/EIA/IS-2000.4-A-2	A	Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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TTC	TS-3GB-C.S0004-Av6.0	6.0	Published	May 02	http://www.ttc.or.jp/imt/ts/tscs0004-Av6.0.pdf
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ARIB	ARIB STD-T64-C.S0004-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0004-B	1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.4-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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Revision C					
ARIB	ARIB STD-T64-C.S0004-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0004-C	2.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
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TIA	TIA-2000.4-D	D	Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0004-D v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0004-D v2.0
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TIA	TIA-2000.4-D-1[E]	D	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.5 C.S0005

Upper layer (Layer 3) signalling standard for cdma2000 Spread Spectrum Systems

This volume details the Layer 3 call processing and procedures, including the requirements for the mobile station and the BS CDMA operation. Section 1 defines the terms and numeric indications used in this document. Section 2 defines requirements that are specific to CDMA mobile station equipment and operation. Section 3 defines requirements that are specific to CDMA BS equipment and operation.

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ARIB	ARIB STD-T64-C.S0005-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
Revision A					
ARIB	ARIB STD-T64-C.S0005-A v6.0	6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0005-A	6.0	Published	Feb 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.5-A-2	A	Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0005-A v6.0	6.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0005-A v6.0
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CCSA	CCSA-TSD-MC-C.S0005-B	1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.5-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0005-B v1.0	1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0005-B v1.0
TTC	TS-3GB-C.S0005-Bv1.0	1.0	Published	May 02	http://www.ttc.or.jp/imt/ts/tscs0005-Bv1.0.pdf
Revision C					
ARIB	ARIB STD-T64-C.S0005-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0005-C	2.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.5-C	C	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0005-C v2.0	2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0005-C v2.0
Revision C-1					
TIA	TIA-2000.5-C-1[E]	C	Published	Jun 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision D					
ARIB	ARIB STD-T64-C.S0005-D v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TIA	TIA-2000.5-D	D	Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0005-D v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0005-D v2.0

5.2.2.1.1.6 C.S0006

Analogue Signalling standard for cdma2000 Spread Spectrum Systems

This volume specifies analogue operation at 800 MHz based upon the standard TIA/EIA-553-A. This standard provides the differences within TIA/EIA-553-A, which are used by dual-mode mobile stations. Section 1 defines the terms and numeric indications used in this document. Section 2 describes the requirements for CDMA-analogue dual-mode mobile stations operating in the analogue mode. Section 3 describes the requirements for analogue BSs. Section 4 describes the requirements for CDMA-analogue dual-mode mobile stations, which use the 32-digit dialing option on the reverse analogue control channel. In addition, this section describes mobile station requirements for use of the optional extended protocol. Section 5 describes the BS requirements for using the 32-digit dialing option on the reverse analogue control channel. In addition, this section describes BS requirements for use of the optional extended protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision A					
CCSA	CCSA-TSD-MC-C.S0006-A	6.0	Published	Feb 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.6-A-2	A	Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0006-A v6.0	6.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0006-A v6.0
Revision B					
CCSA	CCSA-TSD-MC-C.S0006-B	1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.6-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAE.3G-C.S0006-B v1.0	1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0006-B v1.0
Revision C					
CCSA	CCSA-TSD-MC-C.S0006-C	2.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2000.6-C	C	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0006-C v2.0	2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0006-C v2.0
Revision C-1					
TIA	TIA-2000.6-C-1[E]	C	Published	Jun 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision D					
TIA	TIA-2000.6-D	D	Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0006-D v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0006-D v2.0
Revision D-1					
TIA	TIA-2000.6-D-1[E]	D	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.7 C.S0007**Direct Spread Specification for Spread Spectrum Systems on ANSI-41 (DS-41) (Upper Layers Air Interface)**

This specification covers upper layers signalling protocols and procedures for the DS-41 (IMT-2000 CDMA-DS on ANSI-41) radio interface which support functionality customarily classified as pertaining to CC and MM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0007-0	2.0	Published	Jun 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-834		Published	Mar 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0007-0 v2.0	2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0007-0 v2.0

5.2.2.1.1.8 C.S0008**Multi-Carrier Specification for Spread Spectrum Systems on GSM MAP (MC-MAP)**

This specification covers lower layers (Layer 3 RRC, Layer 2, Layer 1) protocols and procedures for the MC-MAP (IMT-2000 CDMA-MC on GSM-MAP) radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0008-0	1.0	Published	Jun 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-833		Published	Mar 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0008-0 v2.0	2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0008-0 v2.0

5.2.2.1.1.9 C.S0009**Standard for Wideband Spread Spectrum Systems**

This Specification defines the original variable rate speech codec which has a full rate of 8 kbit/s.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0009-0	1.0	Published	Dec 99	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0009-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAE.3G-C.S0009	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0009
Revision C					
TIA	TIA/EIA-96-C	C	Published	Aug 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.10 C.S0010

Recommended Minimum Performance Standards for Base Stations Supporting Dual Mode Spread Spectrum Systems

This Specification provides definitions, methods of measurement, and minimum performance requirements for CDMA base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0010	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0010
Revision A					
ARIB	ARIB STD-T64-C.S0010-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0010-A	1.0	Published	Mar 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAE.3G-C.S0010-A	1.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0010-A
Revision B					
ARIB	ARIB STD-T64-C.S0010-B v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0010-B	2.0	Published	Feb 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0010-B v2.0	2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0010-B v2.0
Revision C					
ARIB	ARIB STD-T64-C.S0010-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0010-C	2.0	Published	Feb 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0010-C v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0010-C v2.0
Revision D					
TIA	TIA/EIA-97-D	D	Published	Jun 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision E					
TIA	TIA-97-E	E	Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision E-1					
TIA	TIA-97-E-1[E]	E	Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision F					
TIA	TIA-97-F	F	Published	Mar 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision F-1					
TIA	TIA--97-F-1	F	Published	Jun 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.11 C.S0011**Recommended Minimum Performance Standards for cdma2000 Spread Spectrum Mobile Stations**

This Specification provides definitions, methods of measurement, and minimum performance requirements for CDMA mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0011	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0011
Revision A					
ARIB	ARIB STD-T64-C.S0011-A v2.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0011-A	1.0	Published	Mar 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAE.3G-C.S0011-A	2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0011-A
Revision B					
ARIB	ARIB STD-T64-C.S0011-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0011-B	1.0	Published	Feb 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0011-B V1.0	1.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0011-B V1.0
Revision C					
ARIB	ARIB STD-T64-C.S0011-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0011-C	2.0	Published	Feb 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0011-C v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0011-C v2.0
Revision D					
TIA	TIA/EIA-98-D	D	Published	Jun 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision E					
TIA	TIA-98-E	E	Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision F					
TIA	TIA-98-F	F	Published	Jul 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision F-1					
TIA	TIA-98-F-1	F	Published	Jun 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.12 C.S0012**Minimum Performance Standard for Speech Service Option 1**

This Specification provides definitions, methods of measurement, and minimum performance requirements for the 8 kbit/s speech codec, C.S0009 (see § 5.2.2.1.1.9).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0012-0	1.0	Published	Dec 99	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0012-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAE.3G-C.S0012	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0012

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TIA	TIA/EIA-125-A	A	Published	Aug 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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5.2.2.1.1.13 C.S0013**Loopback Service Options (LSO) for cdma2000 Spread Spectrum System**

This Specification defines loopback mechanism used for testing CDMA mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0013	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0013
Revision A					
ARIB	ARIB STD-T64-C.S0013-A		Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0013-A	1.0	Published	Mar 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAE.3G-C.S0013-A	1.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0013-A
Revision C					
TIA	TIA/EIA-126-C	C	Published	Aug 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision D					
TIA	TIA/EIA-126-D	D	Published	Jun 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.14 C.S0014**Enhanced Variable Rate Codec Speech Service Option 3 for Wideband Speech Digital Systems – Addendum 3**

This Specification defines the Enhanced Variable Rate Speech codec (EVRC) which has a full rate of 8 kbit/s.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-127-1		Published	Aug 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-127		Published	Jan 97	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-127-2		Published	Sep 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-127-3		Published	Sep 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0014-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAE.3G-C.S0014	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0014
Revision 0-1					
ARIB	ARIB STD-T64-C.S0014-0-1		Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
Revision A					
ARIB	ARIB STD-T64-C.S0014-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0014-A	1.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-127-A	A	Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0014-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0014-A v1.0

Revision B

ARIB	ARIB STD-T64-C.S0014-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0014-B	1.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0014-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0014-B v1.0

Revision C

ARIB	ARIB STD-T64-C.S0014-C v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0014-C	1.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-127-C	C	Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0014-C v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0014-C v1.0

5.2.2.1.1.15 C.S0015**Short Message Services for Wideband Spread Spectrum Systems**

This Specification defines the short message service feature and related procedures.

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Revision 0					
TTA	TTAE.3G-C.S0015	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0015
Revision A					
ARIB	ARIB STD-T64-C.S0015-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0015-A	2.0	Published	Sep 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA-637-A	A	Published	Sep 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0015-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0015-A v2.0
Revision B					
ARIB	ARIB STD-T64-C.S0015-B v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0015-B	2.0	Published	Sep 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-637-B	B	Published	Jan 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0015-B v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0015-B v2.0
Revision B-1					
TIA	TIA-637-B-1[E]	B	Published	Nov 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision C-1					
TIA	TIA/EIA-637-C-1 [E]	C	Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.16 C.S0016

Over-the Air Provisioning of Mobile Stations in Spread Spectrum Systems

This Specification defines the over-the-air service provisioning (OTASP) feature and related procedures. This includes over-the-air provisioning of operational parameters, system selection for preferred roaming, and service programming locks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0016	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0016
Revision A					
ARIB	ARIB STD-T64-C.S0016-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0016-A	2.0	Published	Dec 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAE.3G-C.S0016-A v2.0	2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0016-A v2.0
Revision B					
ARIB	ARIB STD-T64-C.S0016-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0016-B	1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA-683-B	B	Published	Dec 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0016-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0016-B v1.0
Revision C					
ARIB	ARIB STD-T64-C.S0016-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0016-C	2.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA-683-C	C	Published	Mar 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0016-C v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0016-C v2.0
Revision D					
TIA	TIA-683-D	D	Published	May 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.17 C.S0017

Data Service Options for Spread Spectrum Systems

This Specification defines the CDMA data services, which include asynchronous and synchronous circuit switched data, packet data, and analog fax. This Specification includes the definition of the protocol stack, and specifications for the various protocol layers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0-2					
ARIB	ARIB STD-T64-C.S0017-0-2 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0017-0	5.0	Published	Feb 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0017-0 v5.0	5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-0 (TIA/EIA/IS-707-A)		Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0017-0 v5.0	5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0017-0 v5.0

Revision 0-1

ARIB	ARIB STD-T64-C.S0017-0-1 (TIA/EIA/IS-707-A-1)		Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
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Revision A

ARIB	ARIB STD-T64-C.S0017-007-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-004-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-003-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-011-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-009-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-010-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-001-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-012-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0017-005-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0017-009-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-012-A	2.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-007-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-010-A	2.0	Published	Sep 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-011-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-004-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-003-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-001-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
CCSA	CCSA-TSD-MC-C.S0017-005-A	1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-707	A	Published	Feb 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A-1	A	Published	Dec 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A-2	A	Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A-3	A	Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A	A	Published	Apr 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0017-001-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0017-001-A v1.0

Revision B

TIA	TIA-707.12-B-1[E]	B	Published	Jun 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-707.10-B-1[E]	B	Published	Jun 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.18 C.S0018

Minimum Performance Specification for Enhanced Variable Rate Codec (EVRC) Speech Option 3 for Spread Spectrum Systems

This Specification provides definitions, methods of measurement, and minimum performance requirements for the EVRC speech codec, C.S0014 (see § 5.2.2.1.1.14).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-718		Published	Jul 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

ARIB	ARIB STD-T64-C.S0018-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAE.3G-C.S0018	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0018

Revision B

ARIB	ARIB STD-T64-C.S0018-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0018-B	1.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-718-B	B	Published	Oct 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0018-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0018-B v1.0

Revision C

ARIB	ARIB STD-T64-C.S0018-C v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0018-C	1.0	Published	Dec 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-718-C	C	Published	Apr 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0018-C v1.0	1.0	Approved		http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0018-C v1.0

5.2.2.1.1.19 C.S0020**High Rate Speech Service Option 17 for Wideband Spread Spectrum Communication Systems – Addendum 2**

This Specification defines the high rate variable rate speech codec which has a full rate of 13 kbit/s.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-733-1		Published	Sep 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-733		Published	Mar 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-733-2		Published	Sep 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0020-0	0-0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0020-0-2 V1.0	1.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0020-0-2 V1.0
Revision A					
ARIB	ARIB STD-T64-C.S0020-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0020-A	1.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-733-A	A	Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0020-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0020-A v1.0

5.2.2.1.1.20 C.S0021**Recommended Minimum Performance Standard for the High Rate Speech Option 17 for Wideband Spread Spectrum Communication Systems**

This Specification provides definitions, methods of measurement, and minimum performance requirements for the 13 kbit/s variable-rate speech codec, C.S0020 (see § 5.2.2.1.1.19).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0021-0	1.0	Published	Dec 99	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0021-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAE.3G-C.S0021	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0021
Revision A					
TIA	TIA/EIA-736-A	A	Published	Aug 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.21 C.S0022**Position Determination Service Standard for Dual Mode Spread Spectrum Systems**

This Specification defines the position location feature which provides the capability to locate the mobile station. This specification supports automatic forward link triangulation and GPS position location mechanisms.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0022-0	3.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-801		Published	Nov 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-801-1		Published	Mar 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0022-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0022-0 v3.0	3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0022-0 v3.0
Revision A					
ARIB	ARIB STD-T64-C.S0022-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0022-A	1.0	Published	Mar 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-801-A	A	Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0022-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0022-A v1.0
Revision B					
TTA	TTAT.3G-C.S0022-B v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0022-B v1.0

5.2.2.1.1.22 C.S0023**Removable User Identity Module (R-UIM) for cdma2000 Spread Spectrum Systems**

This Specification provides requirements for removable user identity modules (R-UIM).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-820-1		Published	Jun 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-820		Published	May 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0023-0 v4.0	4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
Revision A					
ARIB	ARIB STD-T64-C.S0023-A v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0023-A	3.0	Published	Dec 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/IS-820-A	A	Published	Sep 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0023-A v3.0	3.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0023-A v3.0
Revision A-1					
TIA	TIA-820-A-1[E]	A	Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A-2					
TIA	TIA-820-A-2[E]	A	Published	Feb 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision B

ARIB	ARIB STD-T64-C.S0023-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0023-B	1.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-820-B	B	Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0023-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0023-B v1.0

Revision C

ARIB	ARIB STD-T64-C.S0023-C v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0023-C	2.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-820-C	C	Published	Dec 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0023-C v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0023-C v2.0

5.2.2.1.1.23 C.S0024**cdma2000 High Rate Packet Data Air Interface Specification**

This Specification provides description for high speech packet access.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
ARIB	ARIB STD-T64-C.S0024-0 v4.0	4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TIA	TIA/EIA/IS-856-1		Published	Jan 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-856		Published	Nov 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-856-2[E]		Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0024-0 V4.0	4.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0024-0 V4.0
Revision A					
ARIB	ARIB STD-T64-C.S0024-A v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0024-A	3.0	Published	Sep 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-856-A	A	Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-856-A-1	A	Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0024-A v3.0	3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0024-A v3.0
Revision A-2					
TIA	TIA-856-A-2	A	Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision B					
CCSA	CCSA-TSD-MC-C.S0024-B	2.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-856-B-1	B	Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-856-B	B	Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0024-B v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0024-B v2.0

5.2.2.1.1.24 C.S0025**Markov Service Option (MSO) for cdma2000 Spread Spectrum Systems**

This document specifies procedures for the Markov Service Option (MSO).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0025-0	2.0	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-871		Published	Apr 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0025-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0025-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0025-0 v2.0

5.2.2.1.1.25 C.S0026**Test Data Service Option (TDSO) for cdma2000 Spread Spectrum Systems**

This document specifies procedures for the Test Data Service Option (TDSO).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-870		Published	Apr 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0026-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0026-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0026-0 v2.0
Revision 0-1					
TIA	TIA-870-1[E]		Published	Jan 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A					
ARIB	ARIB STD-T64-C.S0026-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0026-A	1.0	Published	Dec 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-870-A	A	Published	Mar 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0026-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0026-A v1.0

5.2.2.1.1.26 C.S0028**CDMA TTY/TDD Minimum Performance Specification**

This Specification defines the CDMA TTY/TDD Minimum Performance Specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-889		Published	Sep 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0028-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0028-0 v2.0
Revision A					
CCSA	CCSA-TSD-MC-C.S0028-A	1.0	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-889-A	A	Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0028-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0028-A v1.0

5.2.2.1.1.27 C.S0029

Test Application Specification (TAS) for High Rate Packet Data Air Interface

These technical requirements form a compatibility standard for test applications in cdma2000 high rate packet data systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-890		Published	Jul 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-890-1[E]		Published	Jan 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0029-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0029-0 v3.0	3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0029-0 v3.0
Revision A					
ARIB	ARIB STD-T64-C.S0029-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0029-A	1.0	Published	Sep 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-890-A	A	Published	Apr 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0029-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0029-A v1.0
Revision B					
CCSA	CCSA-TSD-MC-C.S0029-B	1.0	Published	Mar 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0029-B v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0029-B v1.0

5.2.2.1.1.28 C.S0030

Selectable Mode Vocoder Service Option for Wideband Spread Spectrum Communication Systems

This Specification defines the Selectable Mode Vocoder Service Option for Wideband Spread Spectrum Communication Systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0030-0	3.0	Published	Mar 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-893		Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0030-0 v3.0	3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0030-0 v3.0	3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0030-0 v3.0
Revision 0-1					
TIA	TIA-893-1[E]		Published	Jul 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.29 C.S0031**Signalling Conformance Tests for cdma2000 Spread Spectrum Systems**

This document facilitates interoperability testing between CDMA infrastructure and CDMA mobile station manufacturers.

5.2.2.1.1.30 C.S0032**Recommended Minimum Performance Standards for cmda2000 High Rate Packet Data Access Network**

This document details definitions, methods of measurement, and minimum performance requirements for access networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-864		Published	Feb 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0032-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0032-0 v2.0	2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0032-0 v2.0
Revision 0-1					
TIA	TIA-864-1[E]		Published	Jan 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A					
ARIB	ARIB STD-T64-C.S0032-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0032-A	2.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-864-A-1	A	Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-864-A	A	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0032-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0032-A v2.0
Revision B					
CCSA	CCSA-TSD-MC-C.S0032-B	1.0	Published	May 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0032-B v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0032-B v1.0

5.2.2.1.1.31 C.S0033**Recommended Minimum Performance Standards for cmda2000 High Rate Packet Data Access Terminal**

This document details definitions, methods of measurement, and minimum performance characteristics for access terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-866-1[E]		Published	Jan 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-866		Published	Feb 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0033-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0033-0 v2.0	2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0033-0 v2.0

Revision A

ARIB	ARIB STD-T64-C.S0033-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0033-A	2.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-866-A	A	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0033-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0033-A v2.0

Revision B

CCSA	CCSA-TSD-MC-C.S0033-B	1.0	Published	May 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0033-B v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0033-B v1.0

5.2.2.1.1.32 C.S0034**Minimum Performance Specification for the Selectable Mode Vocoder (SMV), Speech Service Option 56 for Wideband Spread Spectrum Digital Systems**

This standard details definitions, methods of measurement, verification of bit-exactness, and minimum performance characteristics of C.S0030-0 Selectable Mode Vocoder (SMV) for digital cellular wideband spread spectrum mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0034-0	1.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-894		Published	Aug 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

ARIB	ARIB STD-T64-C.S0034-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0034-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0034-0 v1.0

5.2.2.1.1.33 C.S0035**CDMA Card Application Toolkit (CCAT)**

This document contains the requirements for CDMA Card Application Toolkit (CCAT). CCAT is a set of commands and procedures for use during the network operation phase of CDMA. Specifying the interface is to ensure interoperability between an R-UIM and an ME independently of the respective manufacturers and operators. CCAT will allow Service Providers to offer unique services to their subscribers by placing applications they have designed (or third party applications) on the R-UIM that would function on any particular manufacturer's ME that supports the Toolkit features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-915		Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

ARIB	ARIB STD-T64-C.S0035-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0035-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0035-0 v1.0

Revision A

ARIB	ARIB STD-T64-C.S0035-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0035-A	2.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-915-A	A	Published	Apr 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0035-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0035-A v2.0

Revision A-1

TIA	TIA-915-A-1	A	Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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5.2.2.1.1.34 C.S0036

Recommended Minimum Performance Specification for C.S0022-0 Spread Spectrum Mobile

This document details definitions, methods of measurement, and minimum performance characteristics for Position Location Capable Code Division Multiple Access (CDMA) mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0036-0	1.0	Published	Mar 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-918		Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-919		Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-916		Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0036-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0038-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
ARIB	ARIB STD-T64-C.S0037-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0036-0 v1.0	1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0036-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0038-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TIA	TIA-919-A	A	Published	Feb 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A-1					
TIA	TIA-919-A-1	A	Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.35 C.S0037

Signalling Conformance Specification for cdma2000 Wireless IP Networks

This document is designed to facilitate the interoperability testing between mobile stations and infrastructure, as well as provide network specific test cases. Definitions, recommended methods of measurement, and minimum standards are provided.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0037-0	1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
TTA	TTAT.3G-C.S0037-0 v1.0	1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0037-0 v1.0

5.2.2.1.1.36 C.S0038**Signalling Conformance Specification for High Rate Packet Data Air Interface**

These technical requirements form a document for signalling conformance in cdma2000 high rate packet data systems. These requirements ensure that compliant access terminals and compliant access networks can execute tests in meeting the objectives.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-C.S0038-0 v1.0	1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0038-0 v1.0
Revision A					
CCSA	CCSA-TSD-MC-C.S0038-A	2.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0038-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0038-A v2.0
Revision B					
TTA	TTAT.3G-C.S0038-B v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0038-B v1.0

5.2.2.1.1.37 C.S0039**Enhanced Subscriber Privacy for cdma2000 High Rate Packet Data**

Enhanced Subscriber Privacy for HRPD is provided by the use of Advance Encryption Algorithm (AES) by encrypting the air interface to protect subscriber traffic and certain signalling messages from unauthorized disclosure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0039-0	2.0	Published	Aug 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-925-1[E]		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-925		Published	Sep 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0039-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0039-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0039-0 v2.0

5.2.2.1.1.38 C.S0040**IP-Based Over-the-Air Handset Configuration Management (IOTA-HCM)**

These technical requirements form a standard for Over-the-Air Service Provisioning of mobile stations using Internet Protocol (IP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0040-0	1.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
RIB	ARIB STD-T64-C.S0040-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0040-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0040-0 v1.0

5.2.2.1.1.39 C.S0042**Circuit-Switched Video Conferencing Services**

This specification defines the functional characteristics and requirements of the circuit-switched video conferencing services. The service features and system requirements are defined to provide video conferencing services in 3GPP2 wireless telecommunications networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0042-0	1.0	Published	Aug 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-926		Published	Dec 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0042-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0042-0 v1.0	1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0042-0 v1.0

5.2.2.1.1.40 C.S0043**Signalling Conformance Test Specification for cdma2000 Spread Spectrum Systems**

This specification defines air interface signalling conformance tests for CDMA base stations and mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0043-0	1.0	Published	Sep 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1035		Published	Feb 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0043-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0043-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0043-0 v1.0

5.2.2.1.1.41 C.S0044**Interoperability Specification for cdma2000 Air Interface**

This specification defines air interface interoperability tests for CDMA/HRPD mobile stations/access terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1036		Published	Jan 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0044-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0044-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0044-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0044-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0044-A	1.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1036-A	A	Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0044-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0044-A v1.0

5.2.2.1.1.42 C.S0045**Multimedia Messaging Service (MMS) Media Format and Codecs for cdma2000 Spread Spectrum Systems**

This document defines content types, media formats and codecs for the non-real time Multimedia Messaging Service (MMS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1011		Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1011-1		Published	Jan 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0045-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0045-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0045-0 v2.0
Revision A					
ARIB	ARIB STD-T64-C.S0045-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0045-A	1.0	Published	Mar 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0045-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0045-A v1.0

5.2.2.1.1.43 C.S0046**3G Multimedia Streaming Services**

This document defines content types, media formats, codecs, and delivery support for multimedia streaming service (MSS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0046-0	1.0	Published	Feb 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1012		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0046-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0046-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0046-0 v1.0

5.2.2.1.1.44 C.S0047**Link-Layer Assisted Service Options for Voice-Over-IP: Header Removal (SO60) and Robust Header Compression (SO61)**

These technical requirements form a standard for the Link-Layer Assisted (LLA) Service Options. Service Option 60 (SO60) defines a variable rate Voice-over-IP (VoIP) service option for transport of header-removed IP/UDP/RTP packets carrying speech frames. Service Option 61 (SO61) defines a variable rate Voice-over-IP (VoIP) service option for transport of header- compressed IP/UDP/RTP packets carrying speech frames.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0047-0	1.0	Published	Mar 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-923		Published	May 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0047-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0047-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0047-0 v1.0

5.2.2.1.1.45 C.S0048**Mobile Equipment (ME) Conformance Testing for cdma2000 Spread Spectrum Standards**

The present document provides the Conformance Test Specification for Removable User Identity Module (R-UIM) enabled Mobile Equipment (ME) terminals

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0048-0	1.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1013		Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0048-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0048-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0048-0 v1.0

5.2.2.1.1.46 C.S0049**Removable User Identity Module Conformance Testing for Spread Spectrum Systems**

The present document provides the test cases for the Removable User Identity Module (R-UIM) Conformance Test Specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0049-0	2.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1014		Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1014-1[E]		Published	Nov 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0049-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0049-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0049-0 v2.0

5.2.2.1.1.47 C.S0050**3GPP2 File Formats for Multimedia Services**

The purpose of this standard is to define a set of file formats to be used with 3GPP2 multimedia services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1015		Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0050-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0050-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0050-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0050-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0050-A	1.0	Published	Mar 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0050-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0050-A v1.0
Revision B					
ARIB	ARIB STD-T64-C.S0050-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0050-B	1.0	Published	May 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0050-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0050-B v1.0

5.2.2.1.1.48 C.S0051**Recommended Minimum Performance Standards for cdma2000 Repeaters**

This specification details definitions, methods of measurement, and minimum performance requirements for CDMA repeaters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0051-0	1.0	Published	Feb 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1037		Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0051-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0051-0 v1.0

5.2.2.1.1.49 C.S0052**Source-Controlled Variable-Rate Multimode Wideband Speech Codec (VMR-WB) Service Option 62 for Spread Spectrum**

These technical requirements form a standard for Service Option 62, source-controlled variable-rate multimode two-way wideband speech Service Option (VMR-WB).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1016-A		Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1016		Published	Oct 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0052-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0052-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0052-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0052-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0052-A	1.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0052-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0052-A v1.0

5.2.2.1.1.50 C.S0053**Minimum Performance Specification for the Source-Controlled Variable-Rate Multimode Wideband Speech Codec (VMR-WB), Service Option 62 for Spread Spectrum Systems**

This specification details definitions, methods of measurement, verification of bit-exactness, and minimum performance characteristics of C.S0052-0 cdma2000® wideband speech codec (VMR-WB) Service Option 62 for digital cellular wideband spread spectrum mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1017		Published	Oct 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0053-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0053-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0053-0 v1.0

Revision A

ARIB	ARIB STD-T64-C.S0053-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0053-A	1.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1017-A	A	Published	Oct 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0053-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0053-A v1.0

5.2.2.1.1.51 C.S0054**cdma2000 High Rate Broadcast-Multicast Packet Data Air Interface Specification**

These technical requirements form the compatibility standard for CDMA2000 broadcast high rate packet data systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1006-1[E]		Published	Nov 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1006		Published	Feb 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0054-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0054-0 v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0054-0 v2.0
Revision A					
CCSA	CCSA-TSD-MC-C.S0054-A	1.0	Published	Feb 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/

5.2.2.1.1.52 C.S0055**Packet Switched Video Telephony Services (PSVT/MCS)**

This document specifies the end-to-end protocols and procedures for support of Packet Switched Video Telephony (PSVT) Services over cdma2000 networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-924		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0055-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0055-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0055-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0055-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0055-A	1.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-924-A	A	Published	Feb 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.53 C.S0056

Electro-Acoustic Recommended Minimum Performance Specification for cdma2000 Mobile

This specification details definitions, methods of measurement, and minimum electro-acoustic performance characteristics for CDMA mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0056-0	1.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1042		Published	Nov 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0056-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0056-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0056-0 v1.0

5.2.2.1.1.54 C.S0057

Band Class Specification for cdma2000 Spread Spectrum Systems

This volume defines the band classes of the CDMA Spreading Rate 1 and Spreading Rate 3 multi-carrier air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1030		Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0057-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0057-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0057-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0057-A	1.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1030-A	A	Published	Aug 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-A v1.0
Revision B					
ARIB	ARIB STD-T64-C.S0057-B v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0057-B	1.0	Published	Aug 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1030-B	B	Published	Dec 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-B v1.0
Revision C					
ARIB	ARIB STD-T64-C.S0057-C v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0057-C	1.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1030-C	C	Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-C v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-C v1.0

5.2.2.1.1.55 C.S0058**Over the Air Interoperability Specification for cdma2000 Air Interface**

This specification defines air interface interoperability tests for CDMA mobile stations or access terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1043		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0058-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0058-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0058-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0058-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0058-A	1.0	Published	Feb 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1043-A	A	Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0058-A v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0058-A v1.0

5.2.2.1.1.56 C.S0059**Signaling Conformance Test Specification for cdma2000 Position Determination Services**

This specification defines Position Determination Services signaling conformance tests for CDMA mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0059-0	1.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0059-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0059-0 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0059-0 v1.0

5.2.2.1.1.57 C.S0060**Signalling Conformance Test Specification for Over-the-Air Service Provisioning**

This specification defines mobile station and base station compliance tests for over-the-air messaging and protocol requirements in the cdma2000 family of standards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0060-0	1.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1044		Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0060-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0060-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0060-0 v1.0

5.2.2.1.1.58 C.S0061**Signalling Conformance Test Specification for Short Message Service**

This specification defines SMS signalling conformance tests for CDMA base stations and mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0061-0	1.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1045		Published	Sep 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0061-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0061-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0061-0 v1.0

5.2.2.1.1.59 C.S0062**Signaling Conformance Test Specification for cdma2000 Data Services**

This specification defines Data Services signaling conformance tests for CDMA base stations and mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0062-0	1.0	Published	May 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0062-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0062-0 v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0062-0 v1.0

5.2.2.1.1.60 C.S0063**cdma2000 High Rate Packet Data Supplemental Services**

These technical requirements form a compatibility standard for supplemental services on cdma2000 high rate packet data systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1054		Published	May 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1054-A-1[E]	A	Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0063-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0063-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0063-0 v2.0
Revision A					
ARIB	ARIB STD-T64-C.S0063-A v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0063-A	2.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1054-A	A	Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-A v2.0

5.2.2.1.1.61 C.S0064**IP Based Over-the-Air Device Management (IOTA-DM) for cdma2000 Systems**

This specification describes IP based Over-the-Air device management of mobile stations compliant with cdma2000 standards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0064-0	1.0	Published	Sep 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1059		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0064-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0064-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0064-0 v1.0

5.2.2.1.1.62 C.S0065**cdma2000 Application on UICC for Spread Spectrum Systems**

This specification defines the cdma2000 subscriber identify module (CSIM) application.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0065-0	2.0	Published	Dec 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1080-1[E]		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1080		Published	Jul 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0065-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0065-0 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0065-0 v2.0

5.2.2.1.1.63 C.S0066**Over-the-Air Service Provisioning for MEID-Equipped Mobile Stations in Spread Spectrum Systems**

This specification presents recommendations for supporting a mobile station equipped with a Mobile Equipment Identifier (MEID).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0066-0	2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-158		Published	Jan 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
RIB	ARIB STD-T64-C.S0066-0 v2.0	2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0066-0 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0066-0 v2.0

5.2.2.1.1.64 C.S0067

Generic Key Exchange Protocol for cdma2000 High Rate Packet Data Air Interface

This specification defines the generic key exchange protocol for the cdma2000 high rate packet data air interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1081		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0067-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0067-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0067-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0067-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0067-A	1.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-C.S0067-A v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0067-A v1.0

5.2.2.1.1.65 C.S0068

ME Personalization for cdma2000 Spread Spectrum Systems

This specification defines the mobile equipment personalization feature.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0068-0	1.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1009		Published	Oct 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0068-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0068-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0068-0 v1.0

5.2.2.1.1.66 C.S0069

ISIM Application on UICC for cdma2000 Spread Spectrum Systems

This specification defines the IP multimedia services identity module (ISIM) application.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0069-0	1.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1078		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0069-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0069-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0069-0 v1.0

5.2.2.1.1.67 C.S0072**Mobile Station Equipment Identifier (MEID) Support for cdma2000 Spread Spectrum Systems**

This specification defines the air interface requirements for implementing MEID and enhanced private long code mask (PLCM) features in Revision 0 through Revision C mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0072-0	1.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1082		Published	Sep 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0072-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0072-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0072-0 v1.0

5.2.2.1.1.68 C.S0073**Signalling Test Specification for Mobile Station Equipment Identifier (MEID) Support for cdma2000 Spread Spectrum Systems**

This specification defines air interface signalling conformance and interoperability tests for CDMA base stations and mobile stations implementing MEID.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1084		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0073-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0073-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0073-0 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0073-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
CCSA	CCSA-TSD-MC-C.S0073-A	1.0	Published	Mar 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TA	TTAT.3G-C.S0073-A v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0073-A v1.0

5.2.2.1.1.69 C.S0074**UICC-Terminal interface Physical and Logical characteristics for cdma2000 Spread Spectrum Systems**

This specification specifies the interface between the UICC and the Terminal for cdma2000 network operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0074-0	1.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1058		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0074-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0074-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0074-0 v1.0

5.2.2.1.1.70 C.S0075**Interworking Specification for cdma2000 1x and High Rate Packet Data Systems**

This specification contains the air interface requirements for facilitating interworking between cdma2000 HRPD and 1x systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0075-0	1.0	Published	Mar 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1094		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0075-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0075-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0075-0 v1.0

5.2.2.1.1.71 C.S0076**Discontinuous Transmission (DTX) of Speech in cdma2000 Systems**

This specification provides requirements for source controlled variable rate vocoders to implement DTX.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0076-0	1.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1095		Published	Apr 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0076-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0076-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0076-0 v1.0

5.2.2.1.1.72 C.S0077**Broadcast Multicast Service for cdma2000 1x Systems**

This specification defines requirements for support of the Broadcast/Multicast Service (BCMCS) capability on cdma2000 1x spread spectrum systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0077-0	1.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1101		Published	Aug 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0077-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0077-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0077-0 v1.0

5.2.2.1.1.73 C.S0078**Secured Packet Structure for CDMA Card Application Toolkit (CCAT) Applications**

This specification specifies the bearer specific part of secured packets structure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0078-0	1.0	Published	Nov 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1106		Published	May 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0078-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0078-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0078-0 v1.0

5.2.2.1.1.74 C.S0079**Remote APDU Structure for CDMA Card Application Toolkit (CCAT) Applications**

This specification specifies the bearer specific part of Remote APDU (Application Protocol Data Unit) structure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0079-0	1.0	Published	Nov 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1107		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0079-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0079-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0079-0 v1.0

5.2.2.1.1.75 C.S0081**Signaling Conformance Specification for cdma2000 High Rate Packet Data Supplemental Services**

This document specifies the signaling conformance tests for the cdma2000®1 High Rate Packet Data supplemental services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0081-0	1.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1119		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0081-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0081-0 v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0081-0 v1.0

5.2.2.1.1.76 C.S0082**Circuit Services Notification Application Specification for cdma2000 High Rate Packet Data**

These technical requirements form a compatibility standard for 3G1X Circuit Services Notification services on cdma2000 high rate packet data systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0082-0	1.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1110		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0082-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0082-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0082-0 v1.0

5.2.2.1.1.77 C.S0083**Video Codec for 3GPP2 Packet Switched Multimedia Services - H.263**

This specification provides normative and informative recommendations for H.263 decoding for 3GPP2 Packet Switched Multimedia Services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0083-0	1.0	Published	Aug 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1131		Published	May 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0083-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0083-0 v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0083-0 v1.0

5.2.2.1.1.78 C.S0084-000**Overview for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume provides an overview of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-000	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.000-A		Published	May 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1121.000		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-000 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-000 v3.0
Revision A					
TTA	TTAT.3G-C.S0084-000-A v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-000-Av1.0

5.2.2.1.1.79 C.S0084-001**Physical Layer for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the physical layer of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-001	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.001		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-001 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-001 v3.0

5.2.2.1.1.80 C.S0084-002**MAC Layer for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the medium access control layer of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-002	3.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.002		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-002 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-002 v3.0

5.2.2.1.1.81 C.S0084-003**Radio Link Layer for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the radio link layer of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-003	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.003		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-003 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-003 v3.0

5.2.2.1.1.82 C.S0084-004**Application Layer for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the application layer of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-004	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.004		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-004 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-004 v3.0

5.2.2.1.1.83 C.S0084-005**Security Functions for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the security functions of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-005	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.005		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-005 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-005 v3.0

5.2.2.1.1.84 C.S0084-006**Connection Control Plane for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the connection control plane of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-006	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.006		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-006 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-006 v3.0

5.2.2.1.1.85 C.S0084-007**Session Control Plane for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the session control plane of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-007	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.007		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-007 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-007 v3.0

5.2.2.1.1.86 C.S0084-008**Route Control Plane for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the route control plane of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-008	3.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.008		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-008 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-008 v3.0

5.2.2.1.1.87 C.S0084-009**Broadcast-Multicast Upper Layers for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the broadcast multicast upper layers of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0084-009	3.0	Published	Sep 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1121.009		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-009 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-009 v3.0

5.2.2.1.1.88 C.S0085**VoIP Codecs and Protocols**

This specification includes recommendations for VoIP codecs as well as protocol configuration to enable efficient support of VoIP over HRPD Rev A.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0085-0	1.0	Published	May 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1122		Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0085-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0085 v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0085 v1.0
Revision A					
ARIB	ARIB STD-T64-C.S0085-A v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0085-A v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0085-A v1.0

5.2.2.1.1.89 C.S0091**Signaling Conformance Specification for Ultra Mobile Broadband Air Interface**

This specification provides a set of procedures that the UMB access terminal and the UMB access network can use to conduct the signaling conformance tests in a laboratory environment.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0091-0	1.0	Published	Aug 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1151		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0091 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0091 v1.0

5.2.2.1.1.90 C.S0093**Highly Detectable Pilot Specification for the cdma2000 High Rate Packet Data Air Interface**

These technical requirements form the compatibility standard for cdma2000®1 highly detectable pilot systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0093-0	1.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1150		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
ARIB	ARIB STD-T64-C.S0093-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0093 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0093 v1.0

5.2.2.1.1.91 C.S0094**Signaling Conformance Test Specification for Interworking of cdma2000 1x and High Rate Packet Data Systems**

This specification defines air interface signaling conformance tests for CDMA/HRPD mobile stations/access terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-C.S0094-0	1.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
ARIB	ARIB STD-T64-C.S0094-0 v1.0	1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R-9/STD-T64R-9.html
TTA	TTAT.3G-C.S0094 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0094 v1.0

5.2.2.1.1.92 A.S0001**3GPP2 Access Network Interfaces Interoperability Specification (3G-IOS V4.0.0)**

This Specification defines the interfaces within the radio access network and the interfaces from the radio access network to the core network and the packet network. This includes the “A” interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TTC	JP-3GB-A.S0001		Published	May 01	http://www.ttc.or.jp/imt/std/jpas0001v20.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0001-A	2.0	Published	Jun 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2001-A	A	Published	Aug 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0001-A v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0001-A v2.0
TTC	JP-3GB-A.S0001-A		Published	May 01	http://www.ttc.or.jp/imt/ts/tsas0001-A.pdf

5.2.2.1.1.93 A.S0003**BTS-BSC Inter-operability (Abis Interface)**

This Specification defines the BTS-BSC Inter-operability (Abis Interface).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-828		Published	Nov 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTC	TS-3GB-A.S0003v1.0	1.0	Published	Aug 01	http://www.ttc.or.jp/imt/ts/tsas0003v1.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0003-A	2.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0003-A v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0003-A v2.0

5.2.2.1.1.94 A.S0004**CDMA Tandem Free Operation**

This Specification defines the CDMA Tandem Free Operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-895		Published	Feb 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTC	JP-3GB-A.S0004		Published	May 01	http://www.ttc.or.jp/imt/std/jpas0004.pdf
Revision 0					
TTA	TTAE.3G-A.S0004	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-A.S0004
Revision A					
CCSA	CCSA-TSD-MC-A.S0004-A	2.0	Published	Mar 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA-895-A	A	Published	Oct 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0004-A v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0004-A v2.0
TTC	TS-3GB-A.S0004-Av2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0004-Av2.0.pdf
Revision B					
CCSA	CCSA-TSD-MC-A.S0004-B	2.0	Published	Aug 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0004-B V2.0	2.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0004-B V2.0
TTC	TS-3GB-A.S0004-Bv2.0	2.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/tsas0004-Bv2.0.pdf

5.2.2.1.1.95 A.S0006**Interoperability Specification (IOS) for Hybrid Mobile Station/Access Terminal (HAT) Authentication, Using the CAVE Algorithm**

This document provides alternative procedures that allow a properly configured Hybrid mobile station/Access Terminal (HAT) to use its cdma2000®1 1x access network authentication credentials and the Cellular Authentication and Voice Encryption (CAVE) algorithm when accessing an HRPD network that requires HRPD network access authentication.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-A.S0006-0	1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1070		Published	Aug 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAE.3G-A.S0006-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-A.S0006-0 v1.0
TTC	TS-3GB-A.S0006-0v1.0	1.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/tsas0006-0v1.0.pdf

5.2.2.1.1.96 A.S0007**Inter-Operability Specification (IOS) for HRPD**

This Specification defines the Inter-Operability Specification (IOS) for High Rate Packet Data (HRPD) Access Network Interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-878		Published	Dec 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1878-1		Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1878		Published	May 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0007-0 v2.0	2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0007-0 v2.0
Revision A					
CCSA	CCSA-TSD-MC-A.S0007-A	3.0	Published	May 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0007-A v3.0	3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0007-A v3.0
TTC	TS-3GB-A.S0007-Av3.0	3.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0007-Av3.0.pdf

5.2.2.1.1.97 A.S0008**Inter-Operability Specification (IOS) for HRPD**

This specification defines the Inter-Operability Specification (IOS) for High Rate Packet Data (HRPD) Access Network Interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-878-2		Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-878-1		Published	May 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0008-0 v4.0	4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-0 v4.0
TTC	TS-3GB-A.S0008-0v4.0	4.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0008-0v4.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0008-A	3.0	Published	Nov 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-878-A	A	Published	Feb 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-878-A-1	A	Published	Jun 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0008-A v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-A v3.0
TTC	TS-3GB-A.S0008-Av3.0	3.0	Published	Mar 09	http://www.ttc.or.jp/imt/ts/tsas0008-Av3.0.pdf
Revision B					
CCSA	CCSA-TSD-MC-A.S0008-B	2.0	Published	Dec 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0008-B v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-B v2.0
TTC	TS-3GB-A.S0008-Bv2.0	2.0	Published	Mar 09	http://www.ttc.or.jp/imt/ts/tsas0008-Bv2.0.pdf

Revision C

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-A.S0008-C	2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0008-C v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-C v2.0
TTC	TS-3GB-A.S0008-Cv2.0	2.0	Published	Mar 09	http://www.ttc.or.jp/imt/ts/tsas0008-Cv2.0.pdf

5.2.2.1.1.98 A.S0009-A**Interoperability Specification (IOS) for High Rate Packet Data (HRPD) Radio Access Network Interfaces with Session Control in the Packet Control Function**

This specification defines the interoperation of the HRPD RAN system interfaces with session control in the packet control function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision A					
CCSA	CCSA-TSD-MC-A.S0009-A	3.0	Published	Nov 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1878-A-1	A	Published	Jun 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1878-A	A	Published	Mar 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0009-A v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0009-A v3.0
Revision B					
TIA	TIA-1878-B	B	Published	Apr 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision C					
TIA	TIA-1878-C	C	Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.1.1.99 A.S0011**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 1 Overview.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0011-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-0 v2.0
TTC	TS-3GB-A.S0011-0v2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0011-0v2.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0011-A	2.0.1	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0011-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-A v2.0.1
TTC	TS-3GB-A.S0011-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0011-Av2.0.pdf
Revision B					
CCSA	CCSA-TSD-MC-A.S0011-B	1.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2001.1-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0011-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-B v1.0
TTC	TS-3GB-A.S0011-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0011-Bv1.0.pdf

Revision C

CCSA	CCSA-TSD-MC-A.S0011-C	2.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C	C	Published	Jan 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0011-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-C v2.0
TTC	TS-3GB-A.S0011-Cv2.0	2.0	Published	Mar 06	http://www.ttc.or.jp/imt/ts/tsas0011-Cv2.0.pdf

Revision D

TIA	TIA-2001-D	D	Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0011-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-D v1.0
TTC	TS-3GB-A.S0011-Dv1.0	1.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0011-Dv1.0.pdf

5.2.2.1.1.100 A.S0012**Access Network Interfaces (3G-IOS)**

This specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 2 Transport.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0012-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-0 v2.0
TTC	TS-3GB-A.S0012-0v2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0012-0v2.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0012-A	2.0.1	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0012-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-A v2.0.1
TTC	TS-3GB-A.S0012-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0012-Av2.0.pdf
Revision B					
CCSA	CCSA-TSD-MC-A.S0012-B	1.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2001.2-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0012-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-B v1.0
TTC	TS-3GB-A.S0012-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0012-Bv1.0.pdf
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CCSA	CCSA-TSD-MC-A.S0012-C	2.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-2001-C	C	Published	Jan 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0012-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-C v2.0
TTC	TS-3GB-A.S0012-Cv2.0	2.0	Published	Mar 06	http://www.ttc.or.jp/imt/ts/tsas0012-Cv2.0.pdf
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TIA	TIA-2001-C-1		Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0012-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-D v1.0
TTC	TS-3GB-A.S0012-Dv1.0	1.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0012-Dv1.0.pdf

5.2.2.1.1.101 A.S0013**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 3 Features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0013-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-0 v2.0
TTC	TS-3GB-A.S0013-0v2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0013-0v2.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0013-A	2.0.1	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0013-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-A v2.0.1
TTC	TS-3GB-A.S0013-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0013-Av2.0.pdf
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CCSA	CCSA-TSD-MC-A.S0013-B	1.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2001.3-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0013-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-B v1.0
TTC	TS-3GB-A.S0013-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0013-Bv1.0.pdf
Revision C					
CCSA	CCSA-TSD-MC-A.S0013-C	2.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-2001-C	C	Published	Jan 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0013-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-C v2.0
TTC	TS-3GB-A.S0013-Cv2.0	2.0	Published	Mar 06	http://www.ttc.or.jp/imt/ts/tsas0013-Cv2.0.pdf
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TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0013-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-D v1.0
TTC	TS-3GB-A.S0013-Dv1.0	1.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0013-Dv1.0.pdf

5.2.2.1.1.102 A.S0014**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 4 (A1, A2 and A5 Interfaces).

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Revision 0					
TTA	TTAT.3G-A.S0014-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-0 v2.0
TTC	TS-3GB-A.S0014-0v2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0014-0v2.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0014-A	2.0.1	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0014-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-A v2.0.1
TTC	TS-3GB-A.S0014-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0014-Av2.0.pdf

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CCSA	CCSA-TSD-MC-A.S0014-B	1.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2001.4-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0014-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-B v1.0
TTC	TS-3GB-A.S0014-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0014-Bv1.0.pdf

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CCSA	CCSA-TSD-MC-A.S0014-C	2.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-2001-C-1		Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C	C	Published	Jan 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0014-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-C v2.0
TTC	TS-3GB-A.S0014-Cv2.0	2.0	Published	Mar 06	http://www.ttc.or.jp/imt/ts/tsas0014-Cv2.0.pdf

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TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0014-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-D v1.0
TTC	TS-3GB-A.S0014-Dv1.0	1.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0014-Dv1.0.pdf

5.2.2.1.1.103 A.S0015**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 5 (A3 and A7 Interfaces).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0015-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-0 v2.0
TTC	TS-3GB-A.S0015-0v2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0015-0v2.0.pdf
Revision A					
CCSA	CCSA-TSD-MC-A.S0015-A	2.0.1	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0015-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-A v2.0.1
TTC	TS-3GB-A.S0015-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0015-Av2.0.pdf
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CCSA	CCSA-TSD-MC-A.S0015-B	1.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-200-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0015-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-B v1.0
TTC	TS-3GB-A.S0015-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0015-Bv1.0.pdf
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CCSA	CCSA-TSD-MC-A.S0015-C	2.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C	C	Published	Jul 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0015-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-C v2.0
TTC	TS-3GB-A.S0015-Cv2.0	2.0	Published	Mar 06	http://www.ttc.or.jp/imt/ts/tsas0015-Cv2.0.pdf

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TTA	TTAT.3G-A.S0015-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-D v1.0
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5.2.2.1.1.104 A.S0016**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 6 (A8 and A9 Interfaces).

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Revision 0					
TTA	TTAT.3G-A.S0016-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-0 v2.0
TTC	TS-3GB-A.S0016-0v2.0	2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/tsas0016-0v2.0.pdf
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CCSA	CCSA-TSD-MC-A.S0016-A	2.0.1	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0016-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-A v2.0.1
TTC	TS-3GB-A.S0016-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0016-Av2.0.pdf
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TIA	TIA/EIA/IS-2001-B		Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0016-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-B v1.0
TTC	TS-3GB-A.S0016-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0016-Bv1.0.pdf
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TIA	TIA-2001-C	C	Published	Jul 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0016-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-C v2.0
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TTA	TTAT.3G-A.S0016-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-D v1.0
TTC	TS-3GB-A.S0016-Dv1.0	1.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0016-Dv1.0.pdf

5.2.2.1.1.105 A.S0017

Access Network Interfaces (3G-IOS)

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 7 (A10 and A11 Interfaces).

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TTA	TTAT.3G-A.S0017-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-0 v2.0
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TTA	TTAT.3G-A.S0017-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-A v2.0.1
TTC	TS-3GB-A.S0017-Av2.0	2.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/tsas0017-Av2.0.pdf
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CCSA	CCSA-TSD-MC-A.S0017-B	1.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA/EIA/IS-2001-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0017-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-B v1.0
TTC	TS-3GB-A.S0017-Bv1.0	1.0	Published	Sep 04	http://www.ttc.or.jp/imt/ts/tsas0017-Bv1.0.pdf
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CCSA	CCSA-TSD-MC-A.S0017-C	2.0	Published	Dec 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-2001-C	C	Published	Jul 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0017-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-C v2.0
TTC	TS-3GB-A.S0017-Cv2.0	2.0	Published	Mar 06	http://www.ttc.or.jp/imt/ts/tsas0017-Cv2.0.pdf
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TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0017-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-D v1.0
TTC	TS-3GB-A.S0017-Dv1.0	1.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tsas0017-Dv1.0.pdf

5.2.2.1.1.106 A.S0019

Interoperability Specification (IOS) for Broadcast Multicast Services (BCMCS)

This document provides user level descriptions and access network call flows and messages designed to assist in the understanding of BCMCS operation.

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TIA	TIA-2006		Published	Mar 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0019-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0019-0 v2.0
TTC	TS-3GB-A.S0019-0v1.0	1.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/tsas0019-0v1.0.pdf

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CCSA	CCSA-TSD-MC-A.S0019-A	2.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-A.S0019-A v2.0	2.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0019-A v2.0
TTC	TS-3GB-A.S0019-Av2.0	2.0	Published	Jun 08	http://www.ttc.or.jp/imt/ts/tsas0019-Av2.0.pdf

5.2.2.1.1.107 A.S0020

Interoperability Specification (IOS) for Ultra Mobile Broadband (UMB) Radio Access Network Interfaces

This document provides an interoperability specification for a RAN that supports UMB.

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CCSA	CCSA-TSD-MC-A.S0020-0	2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1134-1		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0020-0 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0020-0 v2.0
TTC	TS-3GB-A.S0020-0v2.0	2.0	Published	Sep 08	http://www.ttc.or.jp/imt/ts/tsas0020-0v2.0.pdf

5.2.2.1.1.108 A.S0021

Inter-Technology Handoff for Ultra Mobile Broadband (UMB) Radio Access Network Interfaces

This document describes the protocols and procedures to support inter-technology handoff between Ultra Mobile Broadband and other technologies.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-A.S0021-0	1.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TIA-1135		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0021-0 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0021-0 v1.0
TTC	TS-3GB-A.S0021-0v1.0	1.0	Published	Sep 08	http://www.ttc.or.jp/imt/ts/tsas0021-0v1.0.pdf

5.2.2.1.2 cdma2000 System and Service Aspects Specifications**5.2.2.1.2.1 S.R0005****3GPP2 Network Reference Model**

This document describes the network entities and associated reference points that comprise a wireless network.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision A					
CCSA	CCSA-TSD-MC-S.R0005-A	1.0	Published	Dec 99	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TIA	TSB-100-A-1[E]	A	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/TSB-100-A	A	Published	Mar 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TSB-100-A-1[E]	A	Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/TSB-100-A	A	Published	Mar 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-S.R0005-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-S.R0005-A v1.0
Revision B					
CCSA	CCSA-TSD-MC-S.R0005-B	2.0	Published	May 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTA	TTAT.3G-S.R0005-B v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-S.R0005-B v2.0
TTC	TS-3GB-S.R0005-Bv2.0	2.0	Published	Sep 07	http://www.ttc.or.jp/imt/ts/tssr0005-Bv2.0.pdf

5.2.2.1.3 cdma2000 Core Network Specifications**5.2.2.1.3.1 N.S0003****User Identity Module**

This Specification defines the enhancements required to support mobile stations equipped with UIMs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-N.S0003-0	1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
TTC	TS-3GB-N.S0003v1.0	1.0	Published	May 01	http://www.ttc.or.jp/imt/ts/tsns0003v10.pdf
Revision 0					
TTA	TTAE.3G-N.S0003	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-N.S0003

5.2.2.1.3.2 N.S0004**WIN Phase 2**

This Specification defines the enhancements for wireless intelligent network (WIN) which includes trigger for preferred language, advice of charge, rejection of undesired annoying calls, premium rate charging, and freephone service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-MC-N.S0004-0	1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/MC/
Revision 0					
TTA	TTAE.3G-N.S0004	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-N.S0004
TTC	TS-3GB-N.S0004-0v1.0	1.0	Published	May 01	http://www.ttc.or.jp/imt/ts/tsns0004-0v1.0.pdf

5.2.2.1.3.3 X.S0004**Mobile Application Part**

This specification describes procedures necessary to provide to wireless radio telephone subscribers certain services requiring interaction between different wireless systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision E					
TIA	TIA-41.641-E-1[E]		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.641-E-1[E]		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.328-E		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.512-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.520-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.323-E		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.000-E-3[E]		Published	Nov 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.510-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.540-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.590-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.321-E-1[E]		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.520-E-1[E]		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.290-E		Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.200-E		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.000-E-4[E]		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.328-E		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.327-E		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.321-E		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.790-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.325-E		Published	Jun 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.500-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.331-E		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.330-E		Published	Jul 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

TIA	TIA-41.511-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.324-E-1[E]		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.750-E		Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-X.S0004-329 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-329 v1.0
TTA	TTAT.3G-X.S0004-322 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-322 v1.0
TTA	TTAT.3G-X.S0004-325 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-325 v1.0
TTA	TTAT.3G-X.S0004-691 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-691 v3.0
TTA	TTAT.3G-X.S0004-333 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-333 v1.0
TTA	TTAT.3G-X.S0004-323 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-323 v1.0
TTA	TTAT.3G-X.S0004-350 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-350 v1.0
TTA	TTAT.3G-X.S0004-651 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-651 v2.0
TTA	TTAT.3G-X.S0004-630 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-630 v3.0
TTA	TTAT.3G-X.S0004-520 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-520 v2.0
TTA	TTAT.3G-X.S0004-540 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-540 v2.0
TTA	TTAT.3G-X.S0004-641 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-641 v2.0
TTA	TTAT.3G-X.S0004-335 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-335 v1.0
TTA	TTAT.3G-X.S0004-590 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-590 v1.0
TTA	TTAT.3G-X.S0004-331 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-331 v1.0
TTA	TTAT.3G-X.S0004-640 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-640 v2.0
TTA	TTAT.3G-X.S0004-330 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-330 v1.0
TTA	TTAT.3G-X.S0004-371 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-371 v1.0
TTA	TTAT.3G-X.S0004-332 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-332 v1.0
TTA	TTAT.3G-X.S0004-321 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-321 v2.0
TTA	TTAT.3G-X.S0004-326 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-326 v1.0
TTA	TTAT.3G-X.S0004-324 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-324 v2.0
TTA	TTAT.3G-X.S0004-334 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-334 v1.0
TTA	TTAT.3G-X.S0004-328 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-328 v2.0
TTA	TTAT.3G-X.S0004-327 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-327 v1.0
TTA	TTAT.3G-X.S0004-550 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-550 v2.0
TTA	TTAT.3G-X.S0004-000 v8.0	8	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-000 v8.0
TTA	TTAT.3G-X.S0004-336 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-336 v1.0
TTA	TTAT.3G-X.S0004-372 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-372 v1.0
TTA	TTAT.3G-X.S0004-690 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-690 v2.0

5.2.2.2 TDD component**5.2.2.2.1 cdma2000® radio aspects specifications****5.2.2.2.1.1 C.S0009****Standard for Wideband Spread Spectrum Systems**

This Specification defines the original variable rate speech codec which has a full rate of 8 kbit/s.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0009	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0009
Revision C					
TIA	TIA/EIA-96-C	C	Published	Aug 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.2 C.S0012**Minimum Performance Standard for Speech Service Option 1**

This Specification provides definitions, methods of measurement, and minimum performance requirements for the 8 kbit/s speech codec, C.S0009 (see § 5.2.2.2.1.9).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0012	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0012
Revision A					
TIA	TIA/EIA-125-A	A	Published	Aug 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.3 C.S0014**Enhanced Variable Rate Codec Speech Service Option 3 for Wideband Speech Digital Systems – Addendum 3**

This Specification defines the Enhanced Variable Rate Speech codec (EVRC) which has a full rate of 8 kbit/s.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-127-3		Published	Sep 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-127-1		Published	Aug 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-127-2		Published	Sep 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-127		Published	Jan 97	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAE.3G-C.S0014	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0014
Revision A					
TIA	TIA-127-A	A	Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0014-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0014-A v1.0

Revision B

TTA	TTAT.3G-C.S0014-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0014-B v1.0
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Revision C

TIA	TIA-127-C	C	Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0014-C v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0014-C v1.0

5.2.2.2.1.4 C.S0015**Short Message Services for Wideband Spread Spectrum Systems**

This Specification defines the short message service feature and related procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0015	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0015
Revision A					
TIA	TIA/EIA-637-A	A	Published	Sep 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0015-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0015-A v2.0
Revision B					
TIA	TIA-637-B	B	Published	Jan 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0015-B v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0015-B v2.0
Revision B-1					
TIA	TIA-637-B-1[E]	B	Published	Nov 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision C-1					
TIA	TIA/EIA-637-C-1 [E]	C	Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.5 C.S0016**Over-the Air Provisioning of Mobile Stations in Spread Spectrum Systems**

This Specification defines the over-the-air service provisioning (OTASP) feature and related procedures. This includes over-the-air provisioning of operational parameters, system selection for preferred roaming, and service programming locks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0016	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0016
Revision A					
TTA	TTAE.3G-C.S0016-A v2.0	2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0016-A v2.0
Revision B					
TIA	TIA/EIA-683-B	B	Published	Dec 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0016-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0016-B v1.0

Revision C

TIA	TIA/EIA-683-C	C	Published	Mar 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0016-C v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0016-C v2.0

Revision D

TIA	TIA-683-D	D	Published	May 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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5.2.2.2.1.6 C.S0017**Data Service Options for Spread Spectrum Systems**

This Specification defines the CDMA data services, which include asynchronous and synchronous circuit switched data, packet data, and analog fax. This Specification includes the definition of the protocol stack, and specifications for the various protocol layers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-C.S0017-0 v5.0	5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0017-0 v5.0
Revision A					
TIA	TIA/EIA/IS-707-A	A	Published	Apr 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707	A	Published	Feb 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A-1	A	Published	Dec 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A-2	A	Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-707-A-3	A	Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0017-001-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0017-001-Av1.0
Revision B					
TIA	TIA-707.12-B-1[E]	B	Published	Jun 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-707.10-B-1[E]	B	Published	Jun 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.7 C.S0018**Minimum Performance Specification for Enhanced Variable Rate Codec (EVRC) Speech Option 3 for Spread Spectrum Systems**

This Specification provides definitions, methods of measurement, and minimum performance requirements for the EVRC speech codec, C.S0014 (see § 5.2.2.2.1.14).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-718		Published	Jul 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAE.3G-C.S0018	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0018
Revision B					
TIA	TIA/EIA/IS-718-B	B	Published	Oct 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0018-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0018-B v1.0
Revision C					
TIA	TIA/EIA/IS-718-C	C	Published	Apr 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0018-C v1.0	1.0	Approved		http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0018-C v1.0

5.2.2.2.1.8 C.S0020**High Rate Speech Service Option 17 for Wideband Spread Spectrum Communication Systems – Addendum 2**

This Specification defines the high rate variable rate speech codec which has a full rate of 13 kbit/s.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-733		Published	Mar 98	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-733-2		Published	Sep 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-733-1		Published	Sep 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0020-0-2 V1.0	1.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0020-0-2 V1.0
Revision A					
TIA	TIA-733-A	A	Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0020-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0020-A v1.0

5.2.2.2.1.9 C.S0021**Recommended Minimum Performance Standard for the High Rate Speech Option 17 for Wideband Spread Spectrum Communication Systems**

This Specification provides definitions, methods of measurement, and minimum performance requirements for the 13 kbit/s variable-rate speech codec, C.S0020 (see § 5.2.2.2.1.19).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-C.S0021	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-C.S0021
Revision A					
TIA	TIA/EIA-736-A	A	Published	Aug 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.10 C.S0022**Position Determination Service Standard for Dual Mode Spread Spectrum Systems**

This Specification defines the position location feature which provides the capability to locate the mobile station. This specification supports automatic forward link triangulation and GPS position location mechanisms.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-801-1		Published	Mar 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-801		Published	Nov 99	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0022-0 v3.0	3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0022-0 v3.0
Revision A					
TIA	TIA-801-A	A	Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0022-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0022-A v1.0

Revision B

TTA	TTAT.3G-C.S0022-B v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0022-B v1.0
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5.2.2.2.1.11 C.S0023**Removable User Identity Module (R-UIM) for cdma2000 Spread Spectrum Systems**

This Specification provides requirements for removable user identity modules (R-UIM).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-820-1		Published	Jun 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA/IS-820		Published	May 00	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A					
TIA	TIA/IS-820-A	A	Published	Sep 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0023-A v3.0	3.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0023-A v3.0
Revision A-1					
TIA	TIA-820-A-1[E]	A	Published	Apr 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A-2					
TIA	TIA-820-A-2[E]	A	Published	Feb 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision B					
TIA	TIA-820-B	B	Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0023-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0023-B v1.0
Revision C					
TIA	TIA-820-C	C	Published	Dec 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0023-C v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0023-C v2.0

5.2.2.2.1.12 C.S0025**Markov Service Option (MSO) for cdma2000 Spread Spectrum Systems**

This document specifies procedures for the Markov Service Option (MSO).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-871		Published	Apr 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0025-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0025-0 v2.0

5.2.2.2.1.13 C.S0026**Test Data Service Option (TDSO) for cdma2000 Spread Spectrum Systems**

This document specifies procedures for the Test Data Service Option (TDSO).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-870		Published	Apr 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0026-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0026-0 v2.0
Revision 0-1					
TIA	TIA-870-1[E]		Published	Jan 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A					
TIA	TIA-870-A	A	Published	Mar 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0026-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0026-A v1.0

5.2.2.2.1.14 C.S0028**CDMA TTY/TDD Minimum Performance Specification**

This Specification defines the CDMA TTY/TDD Minimum Performance Specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA/IS-889		Published	Sep 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0028-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0028-0 v2.0
Revision A					
TIA	TIA-889-A	A	Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0028-A v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0028-A v1.0

5.2.2.2.1.15 C.S0030**Selectable Mode Vocoder Service Option for Wideband Spread Spectrum Communication Systems**

This Specification defines the Selectable Mode Vocoder Service Option for Wideband Spread Spectrum Communication Systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-893		Published	May 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0030-0 v3.0	3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0030-0 v3.0
Revision 0-1					
TIA	TIA-893-1[E]		Published	Jul 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.16 C.S0034**Minimum Performance Specification for the Selectable Mode Vocoder (SMV), Speech Service Option 56 for Wideband Spread Spectrum Digital Systems**

This standard details definitions, methods of measurement, verification of bit-exactness, and minimum performance characteristics of C.S0030-0 Selectable Mode Vocoder (SMV) for digital cellular wideband spread spectrum mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-894		Published	Aug 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0034-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0034-0 v1.0

5.2.2.2.1.17 C.S0035**CDMA Card Application Toolkit (CCAT)**

This document contains the requirements for CDMA Card Application Toolkit (CCAT). CCAT is a set of commands and procedures for use during the network operation phase of CDMA. Specifying the interface is to ensure interoperability between an R-UIM and an ME independently of the respective manufacturers and operators. CCAT will allow Service Providers to offer unique services to their subscribers by placing applications they have designed (or third party applications) on the R-UIM that would function on any particular manufacturer's ME that supports the Toolkit features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-915		Published	Feb 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0035-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0035-0 v1.0
Revision A					
TIA	TIA-915-A	A	Published	Apr 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0035-A v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0035-A v2.0
Revision A-1					
TIA	TIA-915-A-1	A	Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.18 C.S0036**Recommended Minimum Performance Specification for C.S0022-0 Spread Spectrum Mobile**

This document details definitions, methods of measurement, and minimum performance characteristics for Position Location Capable Code Division Multiple Access (CDMA) mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-916		Published	Apr 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0036-0 v1.0	1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0036-0 v1.0

5.2.2.2.1.19 C.S0037**Signalling Conformance Specification for cdma2000 Wireless IP Networks**

This document is designed to facilitate the interoperability testing between mobile stations and infrastructure, as well as provide network specific test cases. Definitions, recommended methods of measurement, and minimum standards are provided.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-918		Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0037-0 v1.0	1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0037-0 v1.0
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5.2.2.2.1.20 C.S0039**Enhanced Subscriber Privacy for cdma2000 High Rate Packet Data**

Enhanced Subscriber Privacy for HRPD is provided by the use of Advance Encryption Algorithm (AES) by encrypting the air interface to protect subscriber traffic and certain signalling messages from unauthorized disclosure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-925-1[E]		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-925		Published	Sep 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0039-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0039-0 v2.0
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5.2.2.2.1.21 C.S0040**IP-Based Over-the-Air Handset Configuration Management (IOTA-HCM)**

These technical requirements form a standard for Over-the-Air Service Provisioning of mobile stations using Internet Protocol (IP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TTA	TTAT.3G-C.S0040-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0040-0 v1.0

Revision 0

TTA	TTAT.3G-C.S0040-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0040-0 v1.0
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5.2.2.2.1.22 C.S0045**Multimedia Messaging Service (MMS) Media Format and Codecs for cdma2000 Spread Spectrum Systems**

This document defines content types, media formats and codecs for the non-real time Multimedia Messaging Service (MMS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1011-1		Published	Jan 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1011		Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0045-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0045-0 v2.0
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Revision A

TTA	TTAT.3G-C.S0045-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0045-A v1.0
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5.2.2.2.1.23 C.S0046**3G Multimedia Streaming Services**

This document defines content types, media formats, codecs, and delivery support for multimedia streaming service (MSS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1012		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0046-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0046-0 v1.0
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5.2.2.2.1.24 C.S0047**Link-Layer Assisted Service Options for Voice-Over-IP: Header Removal (SO60) and Robust Header Compression (SO61)**

These technical requirements form a standard for the Link-Layer Assisted (LLA) Service Options. Service Option 60 (SO60) defines a variable rate Voice-over-IP (VoIP) service option for transport of header-removed IP/UDP/RTP packets carrying speech frames. Service Option 61 (SO61) defines a variable rate Voice-over-IP (VoIP) service option for transport of header- compressed IP/UDP/RTP packets carrying speech frames.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-923		Published	May 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0047-0 v1.0	1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0047-0 v1.0
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5.2.2.2.1.25 C.S0048**Mobile Equipment (ME) Conformance Testing for cdma2000 Spread Spectrum Standards**

The present document provides the Conformance Test Specification for Removable User Identity Module (R-UIM) enabled Mobile Equipment (ME) terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1013		Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0048-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0048-0 v1.0
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5.2.2.2.1.26 C.S0049**Removable User Identity Module Conformance Testing for Spread Spectrum Systems**

The present document provides the test cases for the Removable User Identity Module (R-UIM) Conformance Test Specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1014		Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1014-1[E]		Published	Nov 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0049-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0049-0 v2.0

5.2.2.2.1.27 C.S0050**3GPP2 File Formats for Multimedia Services**

The purpose of this standard is to define a set of file formats to be used with 3GPP2 multimedia services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1015		Published	Dec 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0050-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0050-0 v1.0
Revision A					
TTA	TTAT.3G-C.S0050-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0050-A v1.0
Revision B					
TTA	TTAT.3G-C.S0050-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0050-B v1.0

5.2.2.2.1.28 C.S0052**Source-Controlled Variable-Rate Multimode Wideband Speech Codec (VMR-WB) Service Option 62 for Spread Spectrum**

These technical requirements form a standard for Service Option 62, source-controlled variable-rate multimode two-way wideband speech Service Option (VMR-WB).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1016		Published	Oct 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1016-A		Published	Jan 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0052-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0052-0 v1.0
Revision A					
TTA	TTAT.3G-C.S0052-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0052-A v1.0

5.2.2.2.1.29 C.S0053

Minimum Performance Specification for the Source-Controlled Variable-Rate Multimode Wideband Speech Codec (VMR-WB), Service Option 62 for Spread Spectrum Systems

This specification details definitions, methods of measurement, verification of bit-exactness, and minimum performance characteristics of C.S0052-0 cdma2000® wideband speech codec (VMR-WB) Service Option 62 for digital cellular wideband spread spectrum mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1017		Published	Oct 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0053-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0053-0 v1.0
Revision A					
TIA	TIA-1017-A	A	Published	Oct 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0053-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0053-A v1.0

5.2.2.2.1.30 C.S0055

Packet Switched Video Telephony Services (PSVT/MCS)

This document specifies the end-to-end protocols and procedures for support of Packet Switched Video Telephony (PSVT) Services over cdma2000 networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-924		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0055-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0055-0 v1.0
Revision A					
TIA	TIA-924-A	A	Published	Feb 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.31 C.S0056

Electro-Acoustic Recommended Minimum Performance Specification for cdma2000 Mobile

This specification details definitions, methods of measurement, and minimum electro-acoustic performance characteristics for CDMA mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1042		Published	Nov 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0056-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0056-0 v1.0

5.2.2.2.1.32 C.S0057**Band Class Specification for cdma2000 Spread Spectrum Systems**

This volume defines the band classes of the CDMA Spreading Rate 1 and Spreading Rate 3 multi-carrier air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1030		Published	Mar 04	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0057-0 v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-0 v1.0
Revision A					
TIA	TIA-1030-A	A	Published	Aug 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-A v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-A v1.0
Revision B					
TIA	TIA-1030-B	B	Published	Dec 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-B v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-B v1.0
Revision C					
TIA	TIA-1030-C	C	Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0057-C v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0057-C v1.0

5.2.2.2.1.33 C.S0058**Over the Air Interoperability Specification for cdma2000 Air Interface**

This specification defines air interface interoperability tests for CDMA mobile stations or access terminals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1043		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0058-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0058-0 v1.0
Revision A					
TIA	TIA-1043-A	A	Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-C.S0058-A v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0058-A v1.0

5.2.2.2.1.34 C.S0059**Signaling Conformance Test Specification for cdma2000 Position Determination Services**

This specification defines Position Determination Services signaling conformance tests for CDMA mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-C.S0059-0 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0059-0 v1.0

5.2.2.2.1.35 C.S0060**Signalling Conformance Test Specification for Over-the-Air Service Provisioning**

This specification defines mobile station and base station compliance tests for over-the-air messaging and protocol requirements in the cdma2000 family of standards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1044		Published	Feb 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0060-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0060-0 v1.0

5.2.2.2.1.36 C.S0061**Signalling Conformance Test Specification for Short Message Service**

This specification defines SMS signalling conformance tests for CDMA base stations and mobile stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1045		Published	Sep 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0061-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0061-0 v1.0

5.2.2.2.1.37 C.S0064**IP Based Over-the-Air Device Management (IOTA-DM) for cdma2000 Systems**

This specification describes IP based Over-the-Air device management of mobile stations compliant with cdma2000 standards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1059		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0064-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0064-0 v1.0

5.2.2.2.1.38 C.S0065**cdma2000 Application on UICC for Spread Spectrum Systems**

This specification defines the cdma2000 subscriber identify module (CSIM) application.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1080		Published	Jul 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1080-1[E]		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0065-0 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0065-0 v2.0

5.2.2.2.1.39 C.S0066**Over-the-Air Service Provisioning for MEID-Equipped Mobile Stations in Spread Spectrum Systems**

This specification presents recommendations for supporting a mobile station equipped with a Mobile Equipment Identifier (MEID).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-158		Published	Jan 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0066-0 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0066-0 v2.0

5.2.2.2.1.40 C.S0067**Generic Key Exchange Protocol for cdma2000 High Rate Packet Data Air Interface**

This specification defines the generic key exchange protocol for the cdma2000 high rate packet data air interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1081		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0067-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0067-0 v1.0
Revision A					
TTA	TTAT.3G-C.S0067-A v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0067-A v1.0

5.2.2.2.1.41 C.S0068**ME Personalization for cdma2000 Spread Spectrum Systems**

This specification defines the mobile equipment personalization feature.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1009		Published	Oct 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0068-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0068-0 v1.0

5.2.2.2.1.42 C.S0069**ISIM Application on UICC for cdma2000 Spread Spectrum Systems**

This specification defines the IP multimedia services identity module (ISIM) application.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1078		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0069-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0069-0 v1.0

5.2.2.2.1.43 C.S0072**Mobile Station Equipment Identifier (MEID) Support for cdma2000 Spread Spectrum Systems**

This specification defines the air interface requirements for implementing MEID and enhanced private long code mask (PLCM) features in Revision 0 through Revision C mobile stations and base stations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1082		Published	Sep 05	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0072-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0072-0 v1.0
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5.2.2.2.1.44 C.S0073**Signalling Test Specification for Mobile Station Equipment Identifier (MEID) Support for cdma2000 Spread Spectrum Systems**

This specification defines air interface signalling conformance and interoperability tests for CDMA base stations and mobile stations implementing MEID.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1084		Published	Mar 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0073-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0073-0 v1.0
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Revision A

TTA	TTAT.3G-C.S0073-A v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0073-A v1.0
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5.2.2.2.1.45 C.S0074**UICC-Terminal interface Physical and Logical characteristics for cdma2000 Spread Spectrum Systems**

This specification specifies the interface between the UICC and the Terminal for cdma2000 network operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1058		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0074-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0074-0 v1.0
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5.2.2.2.1.46 C.S0076**Discontinuous Transmission (DTX) of Speech in cdma2000 Systems**

This specification provides requirements for source controlled variable rate vocoders to implement DTX.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1095		Published	Apr 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

Revision 0

TTA	TTAT.3G-C.S0076-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0076-0 v1.0
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5.2.2.2.1.47 C.S0078**Secured Packet Structure for CDMA Card Application Toolkit (CCAT) Applications**

This specification specifies the bearer specific part of secured packets structure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1106		Published	May 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0078-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0078-0 v1.0

5.2.2.2.1.48 C.S0079**Remote APDU Structure for CDMA Card Application Toolkit (CCAT) Applications**

This specification specifies the bearer specific part of Remote APDU (Application Protocol Data Unit) structure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1107		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0079-0 v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0079-0 v1.0

5.2.2.2.1.49 C.S0083**Video Codec for 3GPP2 Packet Switched Multimedia Services - H.263**

This specification provides normative and informative recommendations for H.263 decoding for 3GPP2 Packet Switched Multimedia Services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1131		Published	May 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0083-0 v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0083-0 v1.0

5.2.2.2.1.50 C.S0084-000**Overview for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume provides an overview of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.000-A		Published	May 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1121.000		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-000 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-000 v3.0
Revision A					
TTA	TTAT.3G-C.S0084-000-A v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-000-Av1.0

5.2.2.2.1.51 C.S0084-003**Radio Link Layer for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the radio link layer of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.003		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-003 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-003 v3.0

5.2.2.2.1.52 C.S0084-004**Application Layer for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the application layer of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.004		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-004 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-004 v3.0

5.2.2.2.1.53 C.S0084-005**Security Functions for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the security functions of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.005		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-005 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-005 v3.0

5.2.2.2.1.54 C.S0084-006**Connection Control Plane for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the connection control plane of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.006		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-006 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-006 v3.0

5.2.2.2.1.55 C.S0084-007**Session Control Plane for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the session control plane of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.007		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-007 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-007 v3.0

5.2.2.2.1.56 C.S0084-008**Route Control Plane for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the route control plane of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.008		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-008 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-008 v3.0

5.2.2.2.1.57 C.S0084-009**Broadcast-Multicast Upper Layers for Ultra Mobile Broadband (UMB) Air Interface Specification**

This volume defines the broadcast multicast upper layers of the UMB air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.009		Published	Dec 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-009 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-009 v3.0

5.2.2.2.1.58 C.S0084-011**Physical Layer for Ultra Mobile Broadband (UMB) TDD Air Interface Specification**

This volume defines the PHY layer protocols of the Ultra Mobile Broadband TDD air interface standard..

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.011		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-011 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-011 v1.0

5.2.2.2.1.59 C.S0084-012**Medium Access Control Layer Protocols For Ultra Mobile Broadband TDD (UMB-TDD) Air Interface Specification**

This volume defines the MAC layer protocols of the Ultra Mobile Broadband TDD air interface standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1121.012		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0084-012 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0084-012 v1.0

5.2.2.2.1.60 C.S0085**VoIP Codecs and Protocols**

This specification includes recommendations for VoIP codecs as well as protocol configuration to enable efficient support of VoIP over HRPD Rev_A.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1122		Published	Aug 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0085 v1.0	1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0085 v1.0
Revision A					
TTA	TTAT.3G-C.S0085-A v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0085-A v1.0

5.2.2.2.1.61 C.S0091**Signaling Conformance Specification for Ultra Mobile Broadband Air Interface**

This specification provides a set of procedures that the UMB access terminal and the UMB access network can use to conduct the signaling conformance tests in a laboratory environment.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1151		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-C.S0091 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-C.S0091 v1.0

5.2.2.2.1.62 A.S0001**3GPP2 Access Network Interfaces Interoperability Specification (3G-IOS V4.0.0)**

This Specification defines the interfaces within the radio access network and the interfaces from the radio access network to the core network and the packet network. This includes the “A” interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision A					
TIA	TIA/EIA/IS-2001-A	A	Published	Aug 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0001-A v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0001-A v2.0

5.2.2.2.1.63 A.S0003**BTS-BSC Inter-operability (Abis Interface)**

This Specification defines the BTS-BSC Inter-operability (Abis Interface).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-828		Published	Nov 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision A					
TTA	TTAT.3G-A.S0003-A v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0003-A v2.0

5.2.2.2.1.64 A.S0004**CDMA Tandem Free Operation**

This Specification defines the CDMA Tandem Free Operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-895		Published	Feb 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAE.3G-A.S0004	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-A.S0004
Revision A					
TIA	TIA/EIA-895-A	A	Published	Oct 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0004-A v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0004-A v2.0
Revision B					
TTA	TTAT.3G-A.S0004-B V2.0	2.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0004-B V2.0

5.2.2.2.1.65 A.S0006**Interoperability Specification (IOS) for Hybrid Mobile Station/Access Terminal (HAT) Authentication, Using the CAVE Algorithm**

This document provides alternative procedures that allow a properly configured Hybrid mobile station/Access Terminal (HAT) to use its cdma2000@1 1x access network authentication credentials and the Cellular Authentication and Voice Encryption (CAVE) algorithm when accessing an HRPD network that requires HRPD network access authentication.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1070		Published	Aug 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAE.3G-A.S0006-0 v1.0	1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-A.S0006-0 v1.0

5.2.2.2.1.66 A.S0007**Inter-Operability Specification (IOS) for HRPD**

This Specification defines the Inter-Operability Specification (IOS) for High Rate Packet Data (HRPD) Access Network Interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1878-1		Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1878		Published	May 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA/EIA-878		Published	Dec 01	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0007-0 v2.0	2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0007-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0007-A v3.0	3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0007-A v3.0

5.2.2.2.1.67 A.S0008**Inter-Operability Specification (IOS) for HRPD**

This specification defines the Inter-Operability Specification (IOS) for High Rate Packet Data (HRPD) Access Network Interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-878-2		Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-878-1		Published	May 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0008-0 v4.0	4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-0 v4.0
Revision A					
TIA	TIA-878-A-1	A	Published	Jun 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-878-A	A	Published	Feb 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0008-A v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-A v3.0

Revision B

TIA	TIA-878-B	B	Published	Apr 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0008-B v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-B v2.0

Revision C

TIA	TIA-878-C	C	Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0008-C v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0008-C v2.0

5.2.2.2.1.68 A.S0009-A**Interoperability Specification (IOS) for High Rate Packet Data (HRPD) Radio Access Network Interfaces with Session Control in the Packet Control Function**

This specification defines the interoperation of the HRPD RAN system interfaces with session control in the packet control function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision A					
TIA	TIA-1878-A	A	Published	Mar 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-1878-A-1	A	Published	Jun 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0009-A v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0009-A v3.0
Revision B					
TIA	TIA-1878-B	B	Published	Apr 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision C					
TIA	TIA-1878-C	C	Published	May 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm

5.2.2.2.1.69 A.S0011**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 1 Overview.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0011-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0011-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-2001.1-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0011-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-B v1.0
Revision C					
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C	C	Published		http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0011-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-C v2.0

Revision D

TIA	TIA-2001-D	D	Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0011-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0011-D v1.0

5.2.2.2.1.70 A.S0012**Access Network Interfaces (3G-IOS)**

This specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 2 Transport.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0012-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0012-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-2001.2-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0012-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-B v1.0
Revision C					
TIA	TIA-2001-C	C	Published		http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0012-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-C v2.0
Revision D					
TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C-1		Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0012-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0012-D v1.0

5.2.2.2.1.71 A.S0013**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 3 Features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0013-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0013-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-2001.3-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0013-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-B v1.0
Revision C					
TIA	TIA-2001-C	C	Published		http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0013-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-C v2.0

Revision D

TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0013-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0013-D v1.0

5.2.2.2.1.72 A.S0014

Access Network Interfaces (3G-IOS)

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 4 (A1, A2 and A5 Interfaces).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0014-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0014-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-2001.4-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0014-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-B v1.0
Revision C					
TIA	TIA-2001-C-1		Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C	C	Published		http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0014-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-C v2.0
Revision D					
TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0014-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0014-D v1.0

5.2.2.2.1.73 A.S0015

Access Network Interfaces (3G-IOS)

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 5 (A3 and A7 Interfaces).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0015-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0015-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-200-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0015-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-B v1.0
Revision C					
TIA	TIA-2001-C	C	Published	Jul 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0015-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-C v2.0

Revision D

TIA	TIA-2001-D	D	Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0015-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0015-D v1.0

5.2.2.2.1.74 A.S0016**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 6 (A8 and A9 Interfaces).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0016-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0016-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-2001-B		Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0016-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-B v1.0
Revision C					
TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-2001-C	C	Published	Jul 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0016-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-C v2.0
Revision D					
TIA	TIA-2001-D	D	Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0016-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0016-D v1.0

5.2.2.2.1.75 A.S0017**Access Network Interfaces (3G-IOS)**

This Specification defines the Interoperability Specification (IOS) for CDMA 2000 Access Network Interfaces – Part 7 (A10 and A11 Interfaces).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAT.3G-A.S0017-0 v2.0	2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0017-A v2.0.1	2.0.1	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-A v2.0.1
Revision B					
TIA	TIA/EIA/IS-2001-B	B	Published	May 02	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0017-B v1.0	1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-B v1.0
Revision C					
TIA	TIA-2001-C	C	Published	Jul 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0017-C v2.0	2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-C v2.0

Revision C-1

TIA	TIA-2001-C-1	C	Published	Oct 03	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
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Revision D

TIA	TIA-2001-D		Published	Jul 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-A.S0017-D v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0017-D v1.0

5.2.2.2.1.76 A.S0019**Interoperability Specification (IOS) for Broadcast Multicast Services (BCMCS)**

This document provides user level descriptions and access network call flows and messages designed to assist in the understanding of BCMCS operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-2006		Published	Mar 08	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0019-0 v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0019-0 v2.0
Revision A					
TTA	TTAT.3G-A.S0019-A v2.0	2.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0019-A v2.0

5.2.2.2.1.77 A.S0020**Interoperability Specification (IOS) for Ultra Mobile Broadband (UMB) Radio Access Network Interfaces**

This document provides an interoperability specification for a RAN that supports UMB.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1134-1		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0020-0 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0020-0 v2.0

5.2.2.2.1.78 A.S0021**Inter-Technology Handoff for Ultra Mobile Broadband (UMB) Radio Access Network Interfaces**

This document describes the protocols and procedures to support inter-technology handoff between Ultra Mobile Broadband and other technologies.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA-1135		Published	Jan 09	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
Revision 0					
TTA	TTAT.3G-A.S0021-0 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-A.S0021-0 v1.0

5.2.2.2.2 cdma2000 System and Service Aspects Specifications**5.2.2.2.2.1 S.R0005****3GPP2 Network Reference Model**

This document describes the network entities and associated reference points that comprise a wireless network.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision A					
TTA	TTAT.3G-S.R0005-A v1.0	1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-S.R0005-A v1.0
Revision B					
TTA	TTAT.3G-S.R0005-B v2.0	2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-S.R0005-B v2.0

5.2.2.2.3 cdma2000 Core Network Specifications**5.2.2.2.3.1 N.S0003****User Identity Module**

This Specification defines the enhancements required to support mobile stations equipped with UIMs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-N.S0003	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-N.S0003

5.2.2.2.3.2 N.S0004**WIN Phase 2**

This Specification defines the enhancements for wireless intelligent network (WIN) which includes trigger for preferred language, advice of charge, rejection of undesired annoying calls, premium rate charging, and freephone service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Revision 0					
TTA	TTAE.3G-N.S0004	1.0	Approved	Jul 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-N.S0004

5.2.2.2.3.3 X.S0004

Mobile Application Part

This specification describes procedures necessary to provide to wireless radio telephone subscribers certain services requiring interaction between different wireless systems.

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Revision E					
TIA	TIA-41.000-E-3[E]		Published	Nov 06	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TIA	TIA-41.000-E-4[E]		Published	Sep 07	http://www.tiaonline.org/standards/technology/cdma2000/disclaimer.cfm
TTA	TTAT.3G-X.S0004-329 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-329 v1.0
TTA	TTAT.3G-X.S0004-640 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-640 v2.0
TTA	TTAT.3G-X.S0004-371 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-371 v1.0
TTA	TTAT.3G-X.S0004-322 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-322 v1.0
TTA	TTAT.3G-X.S0004-520 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-520 v2.0
TTA	TTAT.3G-X.S0004-333 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-333 v1.0
TTA	TTAT.3G-X.S0004-335 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-335 v1.0
TTA	TTAT.3G-X.S0004-630 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-630 v3.0
TTA	TTAT.3G-X.S0004-321 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-321 v2.0
TTA	TTAT.3G-X.S0004-323 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-323 v1.0
TTA	TTAT.3G-X.S0004-324 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-324 v2.0
TTA	TTAT.3G-X.S0004-325 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-325 v1.0
TTA	TTAT.3G-X.S0004-372 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-372 v1.0
TTA	TTAT.3G-X.S0004-326 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-326 v1.0
TTA	TTAT.3G-X.S0004-690 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-690 v2.0
TTA	TTAT.3G-X.S0004-550 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-550 v2.0
TTA	TTAT.3G-X.S0004-331 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-331 v1.0
TTA	TTAT.3G-X.S0004-330 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-330 v1.0
TTA	TTAT.3G-X.S0004-336 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-336 v1.0
TTA	TTAT.3G-X.S0004-332 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-332 v1.0
TTA	TTAT.3G-X.S0004-000 v8.0	8	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-000 v8.0
TTA	TTAT.3G-X.S0004-334 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-334 v1.0
TTA	TTAT.3G-X.S0004-540 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-540 v2.0
TTA	TTAT.3G-X.S0004-651 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-651 v2.0
TTA	TTAT.3G-X.S0004-641 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-641 v2.0
TTA	TTAT.3G-X.S0004-590 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-590 v1.0
TTA	TTAT.3G-X.S0004-327 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-327 v1.0
TTA	TTAT.3G-X.S0004-691 v3.0	3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-691 v3.0
TTA	TTAT.3G-X.S0004-350 v1.0	1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-350 v1.0
TTA	TTAT.3G-X.S0004-328 v2.0	2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-X.S0004-328 v2.0

5.3 IMT-2000 CDMA TDD

5.3.1 Overview of the radio interface

5.3.1.1 Introduction

The IMT-2000 radio interface specifications for CDMA TDD technology are developed by a partnership of standards development organizations (SDOs) (see Note 1). This radio interface is called the Universal Terrestrial Radio Access (UTRA) time division duplex (TDD), where three options, called 1.28 Mchip/s TDD (TD-SCDMA – see Note 2), 3.84 Mchip/s TDD and 7.68 Mchip/s TDD can be distinguished.

The UTRA TDD specifications have been developed with the strong objective of harmonization with the FDD component (see § 5.1) to achieve maximum commonality. This was achieved by harmonization of important parameters of the physical layer and a common set of protocols in the higher layers are specified for both FDD and TDD, where 1.28 Mchip/s TDD has significant commonality with 3.84 Mchip/s TDD and 7.68 Mchip/s TDD. UTRA TDD with the three options accommodates the various needs of the different Regions in a flexible way and is specified in a common set of specifications.

In the development of this radio interface the core network specifications are based on an evolved GSM-MAP. However, the specifications include the necessary capabilities for operation with an evolved ANSI-41-based core network.

The radio access scheme is direct-sequence code division multiple access. There are three chip rate options: the 3.84 Mchip/s TDD option, with information spread over approximately 5 MHz bandwidth and a chip rate of 3.84 Mchip/s, the 7.68 Mchip/s TDD option with information spread over approximately 10 MHz bandwidth and a chip rate of 7.68 Mchip/s and the 1.28 Mchip/s TDD option, with information spread over approximately 1.6 MHz bandwidth and a chip rate of 1.28 Mchip/s. The radio interface is defined to carry a wide range of services to efficiently support both circuit-switched services (e.g. PSTN- and ISDN-based networks) as well as packet-switched services (e.g. IP-based networks). A flexible radio protocol has been designed where several different services such as speech, data and multimedia can simultaneously be used by a user and multiplexed on a single carrier. The defined radio bearer services provide support for both real-time and non-real-time services by employing transparent and/or non-transparent data transport. The QoS can be adjusted in terms such as delay, BER and FER.

The radio-interface specification includes enhanced features for High-Speed Downlink Packet Access (HSDPA) and improved L2 support for high data rates, allowing for downlink packet-data transmission with peak data rates of 2.8 Mbit/s, 10.2 Mbit/s and 20.4 Mbit/s for the 1.28 Mchip/s, 3.84 Mchip/s and 7.68 Mchip/s modes respectively, and for simultaneous high-speed packet data and other services such as speech on the single carrier. Features for enhanced uplink have been introduced, allowing for improved capacity and coverage, higher data rates, and reduced delay and delay variance for the uplink. The addition of Higher Order Modulation (16-QAM) for the enhanced uplink, allows for peak data rates up to 2.2 Mbit/s, 9.2 Mbit/s and 17.7 Mbit/s for the 1.28 Mchip/s, 3.84 Mchip/s and 7.68 Mchip/s modes respectively. The TDD radio interface is able to support enhanced uplink and high-speed downlink packet data services efficiently without the need for UE-dedicated radio resources thus allowing for low-overhead always-on connectivity and battery savings in the UE. Support has been added for multi-frequency operation for the 1.28 Mchip/s UTRA TDD mode.

The radio access network architecture also provides support for Multimedia Broadcast and Multicast Services, i.e. allowing for multimedia content distribution to groups of users over a point-to-multipoint bearer. A transmission method for broadcast services using time-synchronised common waveform transmission from multiple cells and exhibiting high spectral efficiency has been introduced for the 1.28 Mchip/s, 3.84 Mchip/s and 7.68 Mchip/s TDD modes. QPSK and 16-QAM modulation are supported for this method. It is possible to time multiplex such point to multipoint transmissions with other (e.g. unicast) transmissions within the same TDD carrier, or to dedicate an entire TDD carrier for broadcast transmission.

CDMA TDD was originally specified for the IMT-2000 bands identified in WARC-92 and using 1 900-1 920 MHz and 2 010-2 025 MHz for both uplink and downlink operation. At WRC-2000 additional spectrum for IMT-2000 was also identified and then the relevant 3GPP specifications have been updated to also include the bands of 1 850-1 910 MHz; 1 910-1 930 MHz and 1 930-1 990 MHz for CDMA TDD.

E-UTRAN has been introduced for the evolution of the radio-access technology towards a high-data-rate, low-latency and packet-optimized radio-access technology.

E-UTRAN supports scalable bandwidth operation below 5 MHz bandwidth options up to 20 MHz in both the uplink and downlink. Harmonization of paired and unpaired operation is highly considered to avoid unnecessary fragmentation of technologies.

The estimated peak rates deemed feasible with E-UTRAN are summarized in Tables 13.1 and 13.2 of TR 25.913⁴ for FDD and TDD. For both uplink and downlink, it was found that achieving and even exceeding the peak rate requirements outlined in TR 25.912⁵ is feasible. This is based on a preliminary layer 1 and layer 2 control overhead as well as realistic assumptions on the highest modulation order which can be used in the most favorable WAN environments. Document TS 36.306 provides specific parameters and from this the estimated downlink peak rate under the specified conditions in a 20 MHz reference bandwidth is around 300 Mbit/s and the estimated uplink peak rate under the specified conditions in a 20 MHz reference bandwidth is around 75 Mbit/s.

The radio access network architecture of E-UTRAN consists of the evolved UTRAN NodeBs (eNBs). eNBs host the functions for Radio Resource Management, IP header compression and encryption of user data stream, etc. eNBs are interconnected with each other and connected to an Evolved Packet Core(EPC).

NOTE 1 – Currently, these specifications are developed within the third generation partnership project (3GPP) where the participating SDOs are ARIB, ATIS, CCSA, ETSI, TTA and TTC.

NOTE 2 – The same name TD-SCDMA was previously used for one of the original proposals that was further refined following the harmonization process.

5.3.1.2 Radio access network architecture

The overall architecture of the radio access network is shown in Fig. 35.

The architecture of the radio access network consists of a set of radio network subsystems (RNS) connected to the core network through the Iu interface.

An RNS consists of a radio network controller (RNC) and one or more entities called Node B. The Node B is connected to the RNC through the Iub interface. Node B can handle one or more cells.

The RNC is responsible for the handover decisions that require signalling to the user equipment (UE).

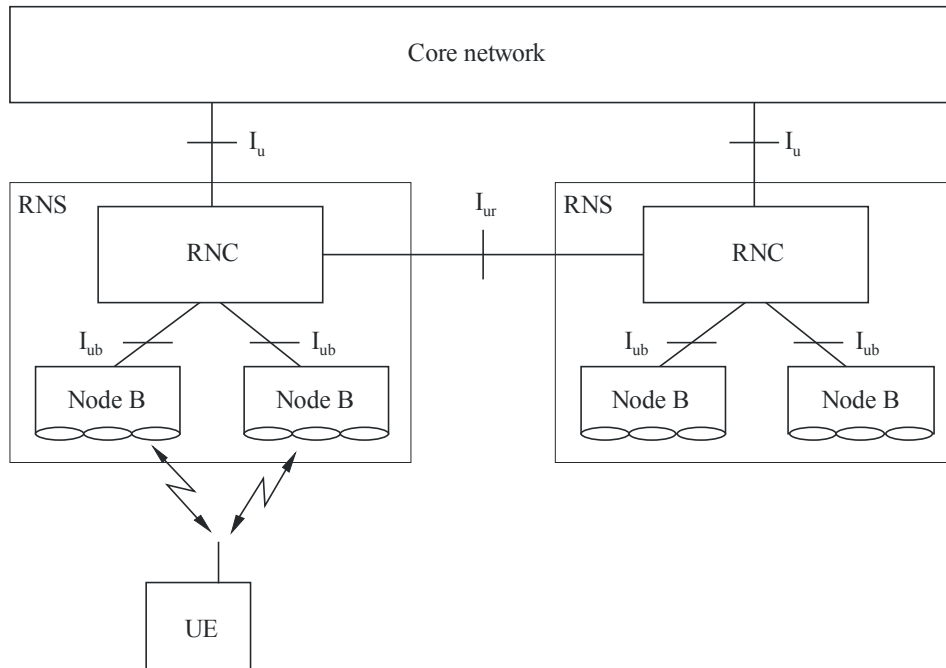
The RNCs of the RNS can be interconnected together through the Iur interface. Iu and Iur are logical interfaces, i.e. the Iur interface can be conveyed over a direct physical connection between RNCs or via any suitable transport network.

⁴ 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Feasibility study for evolved Universal Terrestrial Radio Access (UTRA) and Universal Terrestrial Radio Access Network (UTRAN) (Release 8).

⁵ 3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Requirements for Evolved UTRA (E-UTRA) and Evolved UTRAN (E-UTRAN) (Release 8).

FIGURE 35

Radio access network architecture
(Cells are indicated by ellipses)



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Figure 36 shows the radio interface protocol architecture for the radio access network. On a general level, the protocol architecture is similar to the current ITU-R protocol architecture as described in Recommendation ITU-R M.1035. Layer 2 (L2) is split into the following sub-layers; RLC, MAC, Packet Data Convergence Protocol (PDCP) and Broadcast/Multicast Control (BMC). Layer 3 (L3) and RLC are divided into Control (C-) and User (U-) planes.

In the C-plane, L3 is partitioned into sub-layers where the lowest sub-layer, denoted as RRC, interfaces with L2. The higher layer signalling such as MM and CC are assumed to belong to the core network. There are no L3 elements in UTRAN for the U-plane.

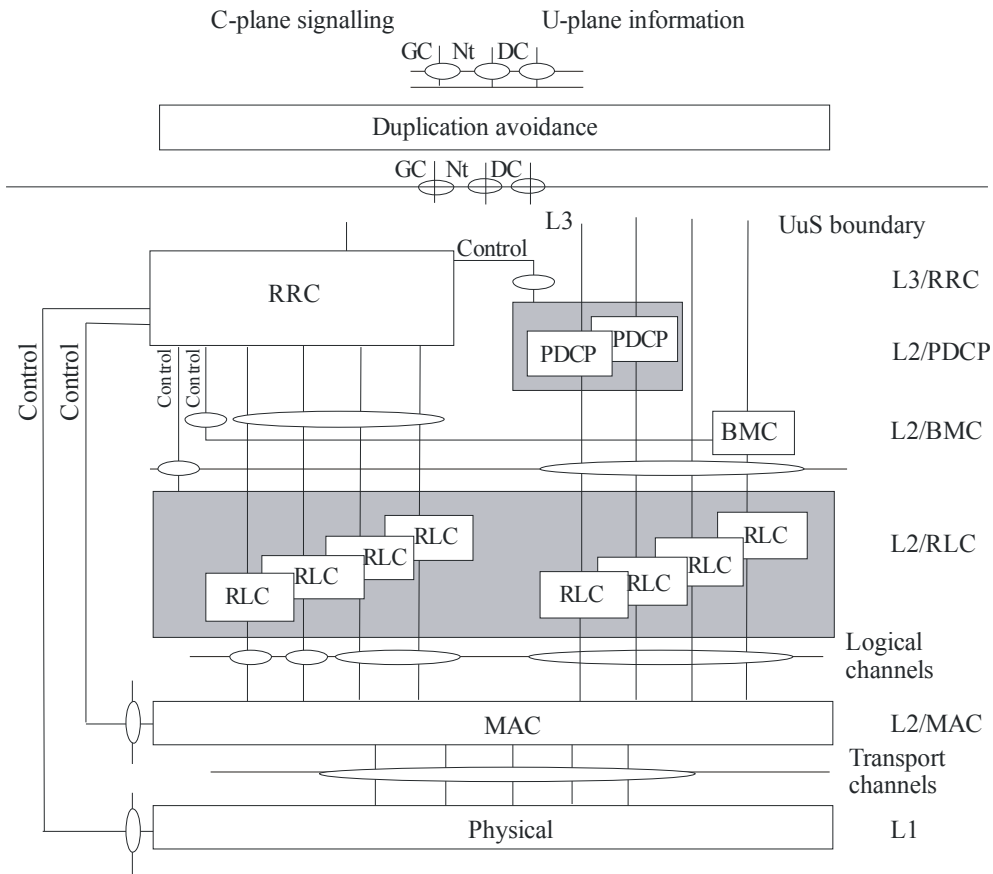
Each block in Fig. 36 represents an instance of the respective protocol. Service access points (SAPs) for peer-to-peer communication are marked with circles at the interface between sub-layers.

The SAP between MAC and the physical layer provides the transport channels. A transport channel is characterized by how the information is transferred over the radio interface (see §§ 5.3.1.3.1.2 and 5.3.1.3.2.2 for an overview of the types of transport channels defined).

The SAPs between RLC and the MAC sub-layer provide the logical channels. A logical channel is characterized by the type of information that is transferred over the radio interface. The logical channels are divided into control channels and traffic channels. The different types of logical channels are not further described in this overview. The physical layer generates the physical channels that will be transmitted over the air. The physical channel in each TDD option (1.28 Mchip/s, 3.84 Mchip/s, 7.68 Mchip/s) is defined by carrier frequency, code, time slot and multi-frame information. In the C-plane, the interface between RRC and higher L3 sub-layers (CC, MM) is defined by the GC, Nt and DC SAPs. These SAPs are not further discussed in this overview.

Also shown in the figure are connections between RRC and MAC as well as RRC and L1 providing local inter-layer control services (including measurement results). An equivalent control interface exists between RRC and the RLC sub-layer. These interfaces allow the RRC to control the configuration of the lower layers. For this purpose separate control SAPs are defined between RRC and each lower layer (RLC, MAC, and L1).

FIGURE 36
Radio interface protocol architecture of the RRC sublayer L2 and L1



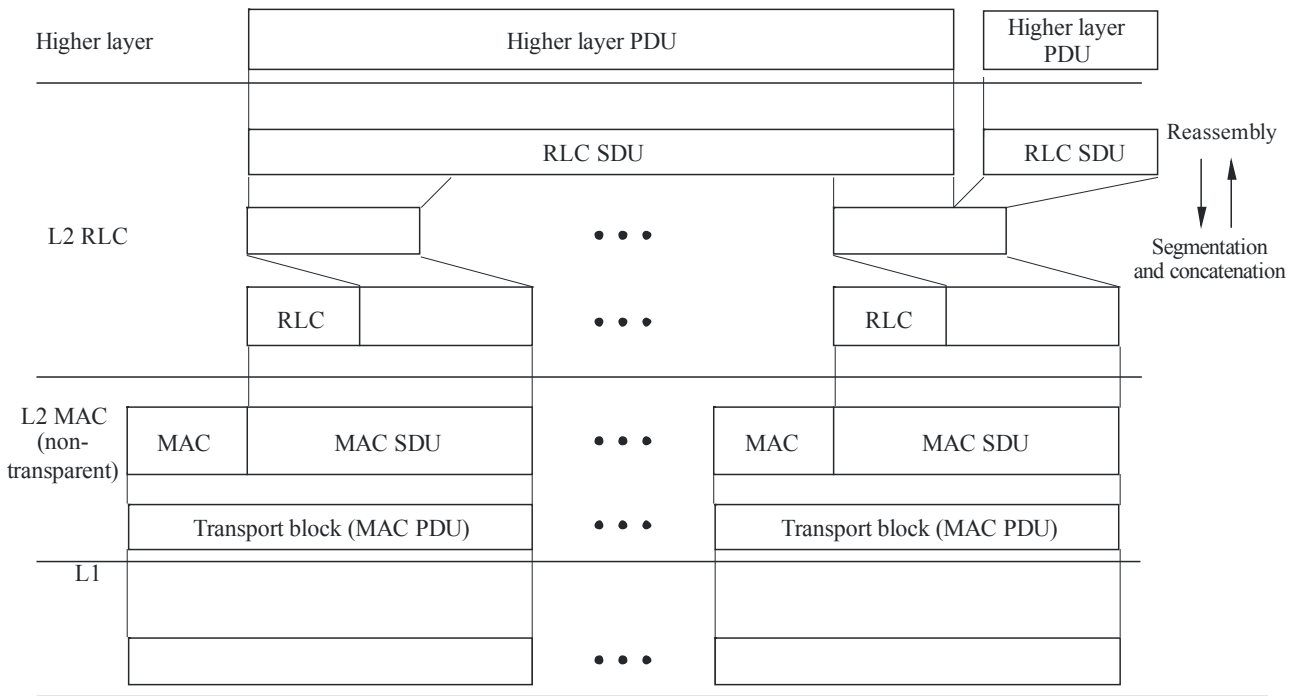
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Figure 37 shows the general structure and some additional terminology definitions of the channel formats at the various sub-layer interfaces indicated in Fig. 36. The figure indicates how higher layer SDUs and PDUs are segmented and multiplexed to transport blocks to be further treated by the physical layer (e.g. CRC handling). The transmission chain of the physical layer is exemplified in the next section.

The E-UTRAN radio access network consists of eNBs, providing the user plane (PDCP/RLC/MAC/PHY) and control plane (RRC) protocol terminations towards the UE. The eNBs are interconnected with each other by means of the X2 interface. The eNBs are also connected by means of the S1 interface to the EPC (Evolved Packet Core), more specifically to the MME (Mobility Management Entity) by means of the S1-MME and to the SAE Gateway by means of the S1-U. The S1 interface supports a many-to-many relation between MMEs/SAE Gateways and eNBs.

FIGURE 37

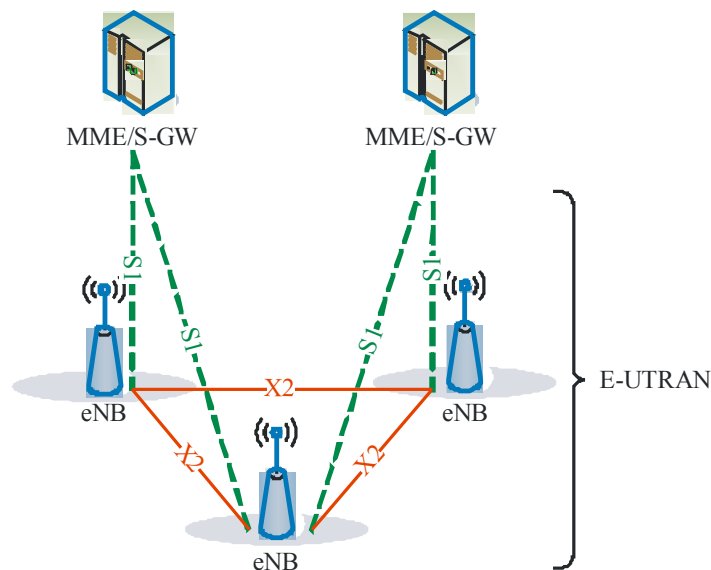
Data flow for a service using a non-transparent RLC and non-transparent MAC
 (see §§ 5.3.1.4.1 and 5.3.1.4.2 for further definitions of the MAC and RLC services and functionality)



M.1457-37

The E-UTRAN radio access network architecture is illustrated in Fig. 38.

FIGURE 38
Overall architecture



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The eNB hosts the following functions:

- functions for Radio Resource Management: Radio Bearer Control, Radio Admission Control, Connection Mobility Control, Dynamic allocation of resources to UEs in both uplink and downlink (scheduling);
- IP header compression and encryption of user data stream;
- selection of an MME at UE attachment;
- routing of User Plane data towards SAE Gateway;
- scheduling and transmission of paging messages (originated from the MME);
- scheduling and transmission of broadcast information (originated from the MME or O&M);
- measurement and measurement reporting configuration for mobility and scheduling.

The MME hosts the following functions:

- NAS signalling;
- NAS signalling security;
- Inter CN node signalling for mobility between 3GPP access networks;
- Idle mode UE Reachability (including control and execution of paging retransmission);
- Tracking Area list management (for UE in idle and active mode);
- PDN GW and Serving GW selection;
- MME selection for handovers with MME change;
- SGSN selection for handovers to 2G or 3G 3GPP access networks;
- Roaming;
- Authentication;
- Bearer management functions including dedicated bearer establishment.

The S-GW hosts the following functions:

- The local Mobility Anchor point for inter-eNB handover;
- Mobility anchoring for inter-3GPP mobility;
- E-UTRAN idle mode downlink packet buffering and initiation of network triggered service request procedure;
- Lawful Interception;
- Packet routing and forwarding;
- Transport level packet marking in the uplink and the downlink;
- Accounting on user and QCI granularity for inter-operator charging;
- UL and DL charging per UE, PDN, and QCI.

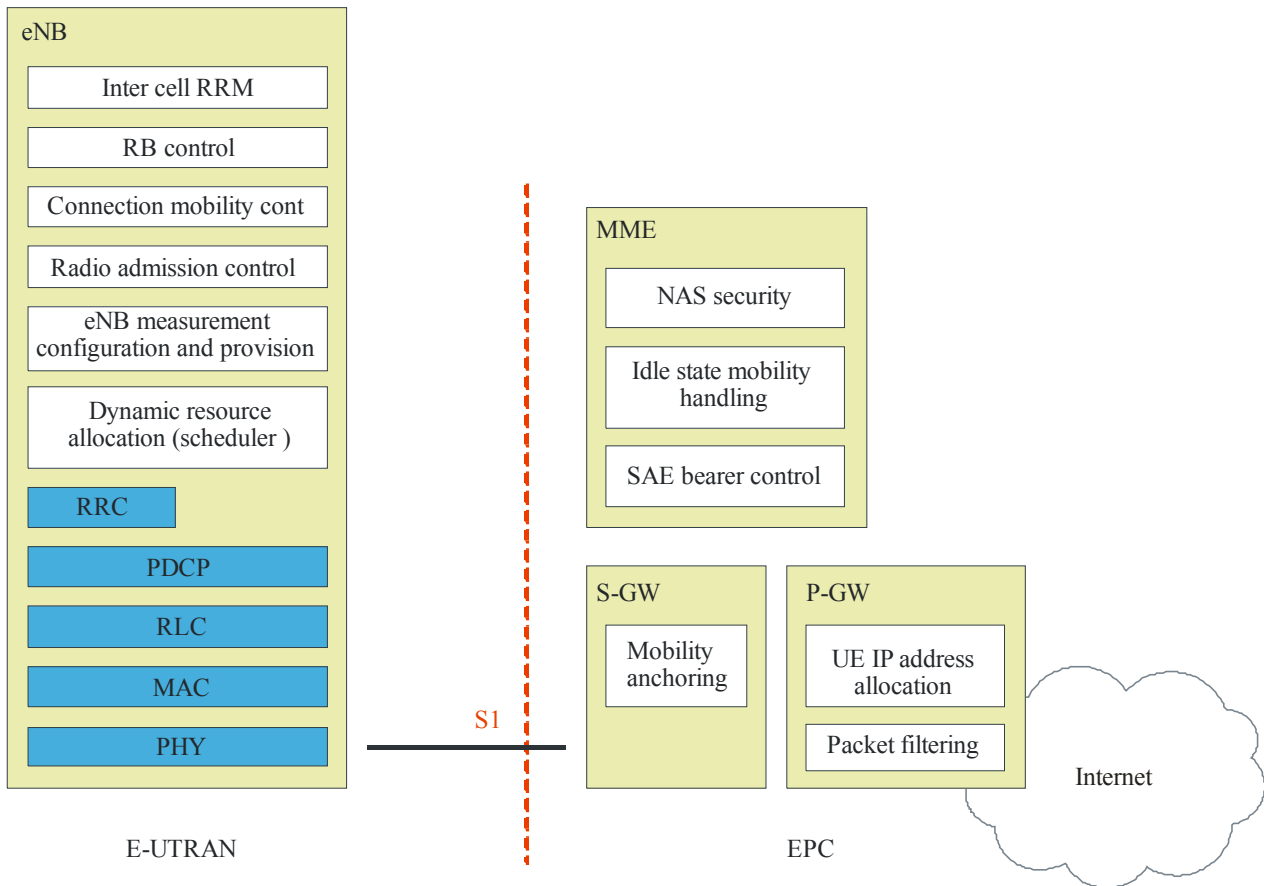
The PDN Gateway (P-GW) hosts the following functions (see 3GPP TS 23.401 [17]):

- Per-user based packet filtering (by e.g. deep packet inspection);
- Lawful Interception;
- UE IP address allocation;
- Transport level packet marking in the downlink;
- UL and DL service level charging, gating and rate enforcement;
- DL rate enforcement based on AMBR.

This is summarized in the Fig. 39 where yellow boxes depict the logical nodes, white boxes depict the functional entities of the control plane and blue boxes depict the radio protocol layers.

FIGURE 39

Overall architecture of the E-UTRAN radio access network



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5.3.1.3 Physical layer

5.3.1.3.1 UTRA TDD (3.84 Mchip/s and 7.68 Mchip/s TDD options)

5.3.1.3.1.1 Physical layer functionality and building blocks

The physical layer includes the following functionality:

- Error detection on transport channels and indication to higher layers.
- FEC encoding/decoding of transport channels.
- Multiplexing of transport channels and demultiplexing of coded composite transport channels.
- Rate matching (data multiplexed on dedicated and shared channels).
- Mapping of coded composite transport channels on physical channels.
- Modulation and demodulation of physical channels.
- Spreading and despreading of physical channels.
- Radio characteristics measurements including FER, signal-to-interference (SIR), interference power level etc., and indication to higher layers.
- Frequency and time (chip, bit, slot, frame) synchronization.
- Power weighting and combining of physical channels.
- Closed-loop power control for downlink.

- RF processing.
- Support of UE positioning methods.
- Beamforming.
- Support of timing advance on uplink channels.
- Support of a Node B synchronization method over the air (not supported for the 7.68 Mchip/s option).

Figure 40 gives the physical layer transmission chain for the user plane data, i.e. from the level of transport channels down to the level of physical channel. The figure shows how several transport channels can be multiplexed onto one or more DPDCH.

The CRC provides for error detection of the transport blocks for the particular transport channel. The CRC can take the length zero (no CRC), 8, 12, 16 or 24 bits depending on the service requirements.

The transport block concatenation and code block segmentation functionality performs serial concatenation of those transport blocks that will be sent in one transmission time interval and any code block segmentation if necessary.

The types of channel coding defined are convolutional coding, turbo coding and no coding. Realtime services use only FEC encoding while non-real-time services uses a combination of FEC and ARQ. The ARQ functionality resides in the RLC sub-layer of Layer 2. The convolutional coding rates are 1/2 or 1/3 while the rate is 1/3 for turbo codes.

The possible interleaving depths are 10, 20, 40 or 80 ms.

The radio frame segmentation performs padding of bits. The rate matching adapts any remaining differences of the bit rate so the number of outgoing bits fit to the available bit rates of the physical channels. Repetition coding and/or puncturing is used for this purpose.

The TrCH multiplexing stage combines transport channels in a serial fashion. This is done every 10 ms. The output of this operation is also called coded composite transport channels.

If several physical channels will be used to transmit the data, the split is made in the physical channel segmentation unit.

5.3.1.3.1.2 Transport channels

The interface to the MAC sub-layer is the transport channels, see Fig. 36. The transport channels define how and with which type of characteristics the data is transferred by the physical layer. They are categorized into dedicated channels or common channels where many UEs are sharing the latter type. Introducing an information field containing the address then does the address resolution, if needed. The physical channel itself defines a dedicated channel. Thus no specific address is needed for the UE. Table 1 summarizes the different types of available transport channels.

FIGURE 40

Transport channel multiplexing structure

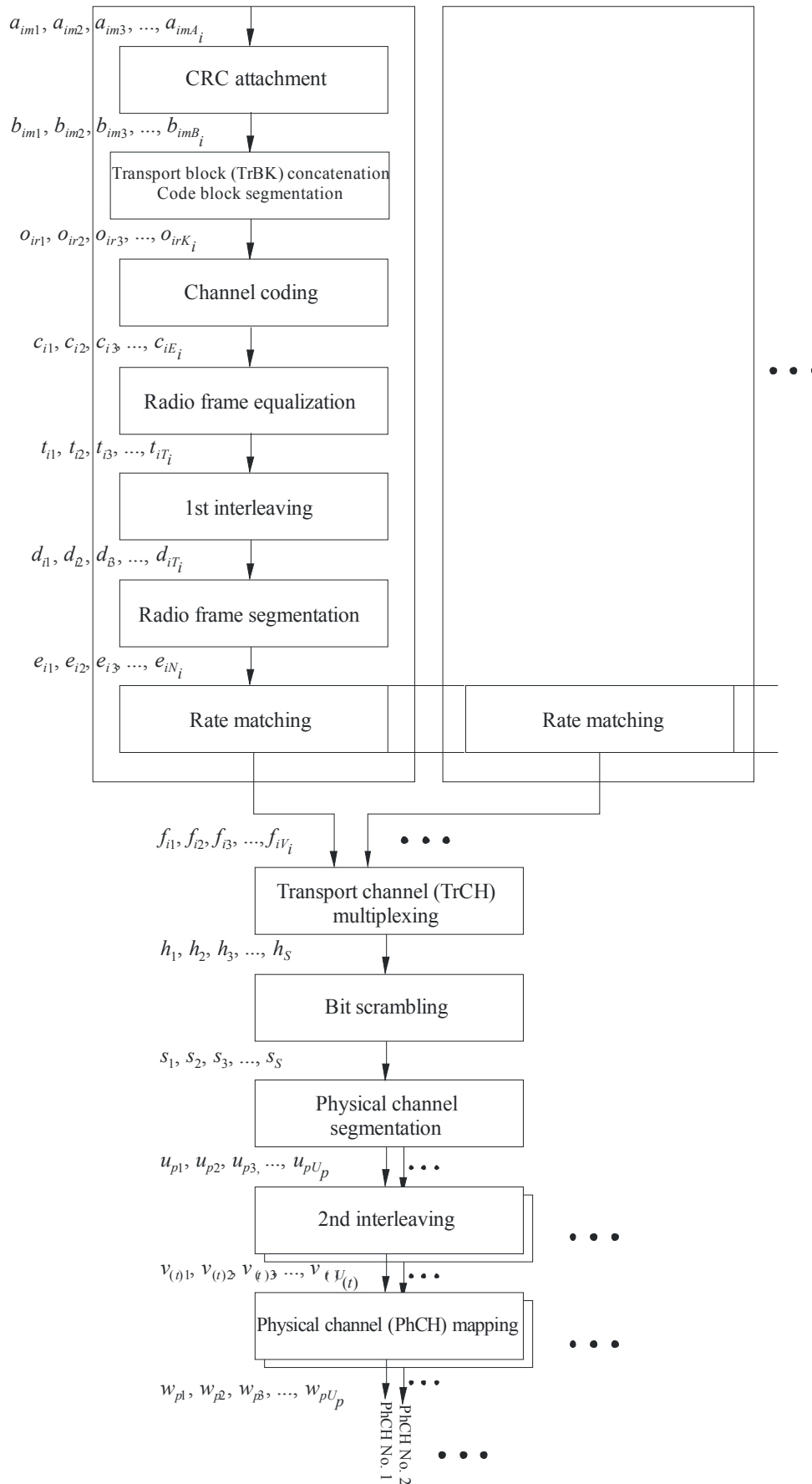


TABLE 1
The defined transport channels

Transport channel	Type and direction	Used for
DCH (Dedicated channel)	Dedicated; uplink and downlink	User or control information to a UE (entire cell or part of cell (lobe-forming))
BCH (Broadcast channel)	Common; downlink	Broadcast system and cell specific information
FACH (Forward access channel)	Common; downlink	Control information when system knows UE location or short user packets to a UE
PCH (Paging channel)	Common; downlink	Control information to UEs when good sleep mode properties are needed, e.g. idle mode operation
RACH (Random access channel)	Common; uplink	Control information or short user packets from an UE
USCH (Uplink shared channel)	Common; uplink	Carries dedicated user data and control information using a shared channel
E-DCH	Common; uplink	An uplink channel serving several UEs carrying dedicated control or traffic data. E-DCH offers the possibility for high-speed uplink packet access through the support of higher-order modulation, adaptive modulation and coding, fast scheduling, and hybrid ARQ with soft combining
DSCH (Downlink shared channel)	Common; downlink	Carries dedicated user data and control information using a shared channel.
HS-DSCH (High Speed Downlink shared channel)	Common; downlink	A downlink channel serving several UEs carrying dedicated control or traffic data. HS-DSCH offers the possibility for high-speed downlink packet access through the support of higher-order modulation, adaptive modulation and coding, fast channel-dependent scheduling, and hybrid ARQ with soft combining

The RACH on the uplink is contention-based while the DCH is reservation-based.

On each transport channel, a number of *Transport Blocks* are delivered to/from the physical layer once every *Transmission Time Interval* (TTI). To each transport channel, there is an associated *Transport Format* or set of transport formats. The transport format describes the physical properties of the transport channel, such as the TTI, the number of transport blocks per TTI, the number of bits per transport blocks, the coding scheme and coding rate, and the modulation scheme.

5.3.1.3.1.3 Transport channels to physical channel mapping

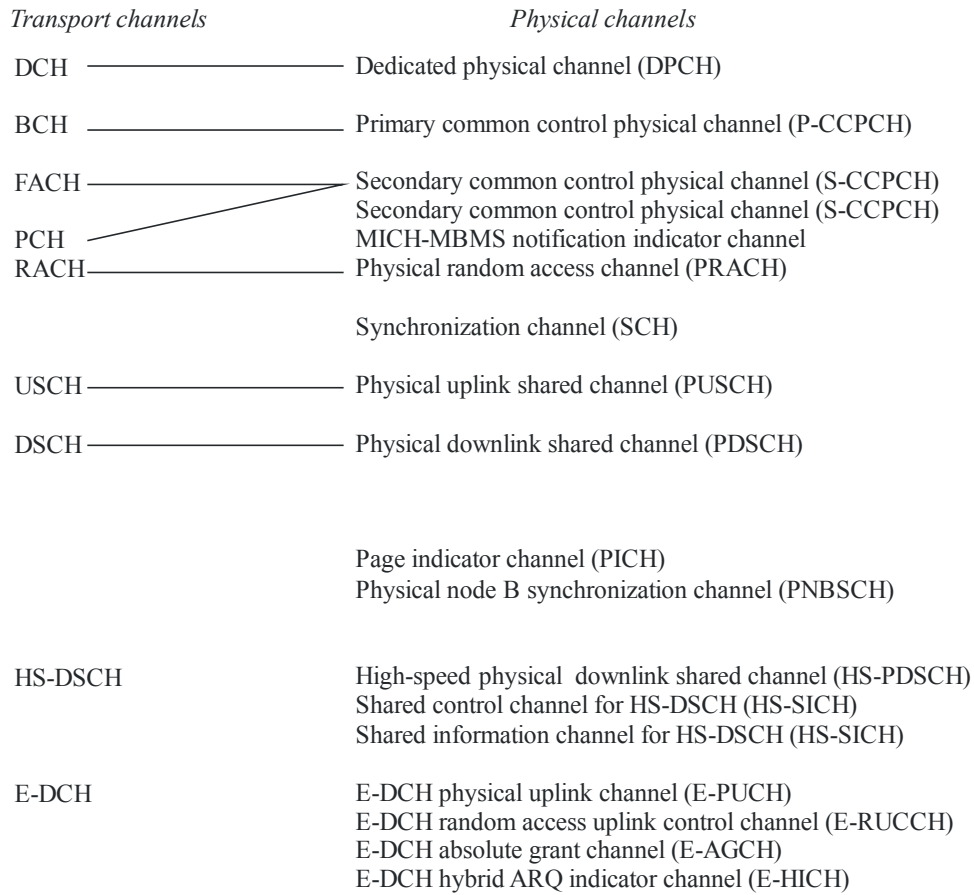
The transport channels are mapped onto the physical channels and Fig. 41 shows the different physical channels and summarizes the mapping of transport channels onto physical channels. Each physical channel has its tailored slot content. The DCH is shown in § 5.3.1.3.1.4.

5.3.1.3.1.4 Physical frame structure

The basic physical frame rate is 10 ms with 15 slots. Fig. 42 shows the frame structure.

FIGURE 41

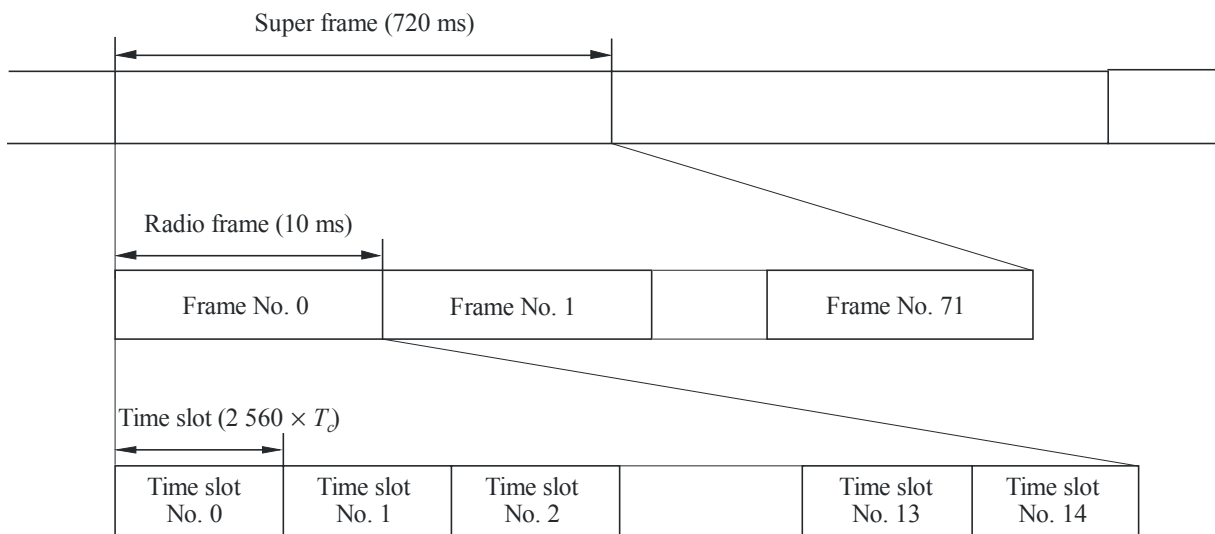
Transport channels, physical channels and their mapping



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FIGURE 42

Basic frame structure

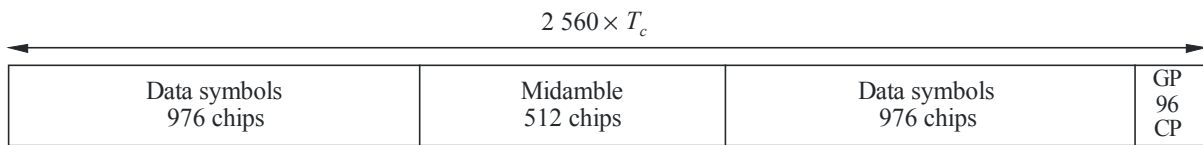


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Each 10 ms frame consists of 15 time slots, each allocated to either the uplink or the downlink. With such a flexibility, this radio interface can be adapted to different environments and deployment scenarios. In any configuration at least one time slot has to be allocated for the downlink and at least one time slot has to be allocated for the uplink.

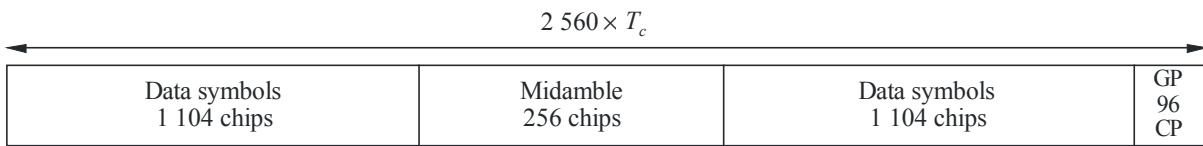
Figures 43, 44 and 45 show the three burst formats stating the content for a slot used by a DCH for 3.84 Mchip/s TDD. The usage of either burst format 1, 2 or 3 is depending on the application for UL or DL type 3 for uplink only and the number of allocated users per time slot.

FIGURE 43
Burst structure of the burst type 1
 (GP denotes the guard period and CP the chip periods)



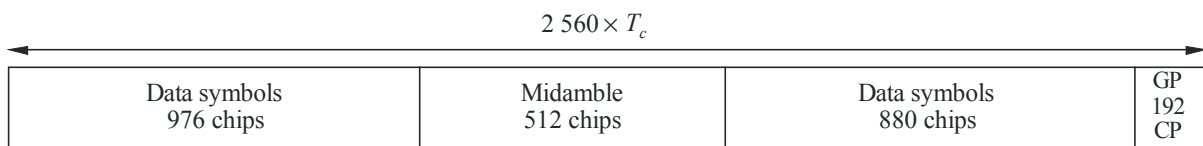
M.1457-43

FIGURE 44
Burst structure of the burst type 2
 (GP denotes the guard period and CP the chip periods)



M.1457-44

FIGURE 45
Burst structure of the burst type 3
 (GP denotes the guard period and CP the chip periods)



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In both cases data bits are QPSK or 16-QAM modulated and the resulting symbols are spread with a channelization code of length 1 to 16 (for the DL, only 1 and 16 apply). Due to this variable spreading factor, each burst provides the number of symbols as shown in Table 2 for the 3.84 Mchip/s option.

Thus, the number of bits per TDD burst in the 3.84 Mchip/s TDD option is two or four times the number shown in Table 2 depending on the applied modulation. Usage of multicode and multiple time slots can be applied.

For the 7.68 Mchip/s TDD option, the same burst structures as for the 3.84 Mchip/s option are employed but with a corresponding doubling in the number of chips per field within the burst. Additionally, the range of spreading factors is extended to provide for spreading factor 32. Thus, channelization codes with lengths ranging between 1 and 32 are used to spread the modulation symbols (for the DL, only 1 and 32). The number of bits per TDD burst in the 7.68 Mchip/s TDD option is shown in Table 3. As for the 3.84 Mchip/s option, usage of multicode and multiple time slots can be applied.

TABLE 2

Number of data symbols in TDD bursts in 3.84 Mchip/s TDD option

Spreading factor, Q	Number of symbols, N , for Burst type 1	Number of symbols, N , for Burst type 2	Number of symbols, N , for Burst type 3
1	1 952	2 208	1 856
2	976	1 104	928
4	488	552	464
8	244	276	232
16	122	138	116

TABLE 3

Number of data symbols in TDD bursts in the 7.68 Mchip/s TDD option

Spreading factor, Q	Number of symbols, N , for Burst type 1	Number of symbols, N , for Burst type 2	Number of symbols, N , for Burst type 3
1	3 904	4 416	3 712
2	1 952	2 208	1 856
4	976	1 104	928
8	488	552	464
16	244	276	232
32	122	138	116

Downlink and uplink transmissions are organized into radio frames with $T_f = 307\,200 \times T_s = 10$ ms duration.

5.3.1.3.1.5 Spreading, modulation and pulse shaping

Spreading is applied after modulation and before pulse shaping. It consists of two operations. The first is the channelization operation, which transforms every data symbol into a number of chips, thus increasing the bandwidth of the signal. The number of chips per data symbol is called the spreading factor (SF) and is in the range of 1 to 16 for 3.84 Mchip/s TDD and in the range 1 to 32 for 7.68 Mchip/s TDD. The second operation is the scrambling operation, where a scrambling code is applied to the spread signal. This procedure is similar to the radio interface specified in § 5.1, but it should be noted that the midamble part in TDD bursts (see Figs 39, 40 and 41) is not spread.

The applied channelization codes are OVFSF-codes that preserve the distinguishability of different users. The applied scrambling code is cell-specific and 128 different scrambling codes are available.

In the uplink, the applied midamble is user specific and derived from a cell-specific basic midamble sequence. In the downlink, the applied midamble is either user specific, code specific (default) or common for the whole cell. In each case 128 different basic midamble sequences are available.

After spreading the same pulse-shaping is applied as in FDD mode, i.e. the filters are root-raised cosine with roll-off $\alpha = 0.22$ in the frequency domain.

Downlink spreading for downlink physical channels other than the downlink DPCH is very similar. For the physical channel to which HS-DSCH and E-DCH are mapped, 16-QAM can be used in addition to QPSK.

5.3.1.3.2 UTRA TDD (1.28 Mchip/s TDD option)

5.3.1.3.2.1 Physical layer functionality and building blocks

The physical layer includes the following functionality:

- Error detection on transport channels and indication to higher layers.
- Forward error control (FEC) encoding/decoding of transport channels.
- Multiplexing of transport channels and demultiplexing of coded composite transport channels.
- Rate matching (data multiplexed on dedicated and shared channels).
- Mapping of coded composite transport channels on physical channels.
- Modulation and demodulation of physical channels.
- Spreading and despreading of physical channels.
- Radio characteristics measurements including FER, SIR, DOA, timing advance, handover measurements, etc.
- Frequency and time (chip, bit, time slot, subframe) synchronization.
- Power weighting and combining of physical channels.
- Power control.
- RF processing.
- UE location/positioning (smart antenna).
- Beamforming for both uplink and downlink (Smart antenna).
- Macrodiversity distribution/combining and handover execution (excluding E-UTRAN).
- Uplink synchronization.
- Random access process.
- Subframe segmentation.

For E-UTRAN, the following functionality is included in addition:

- frequency domain multiplexing with users;
- single frequency combining from multiple cells.

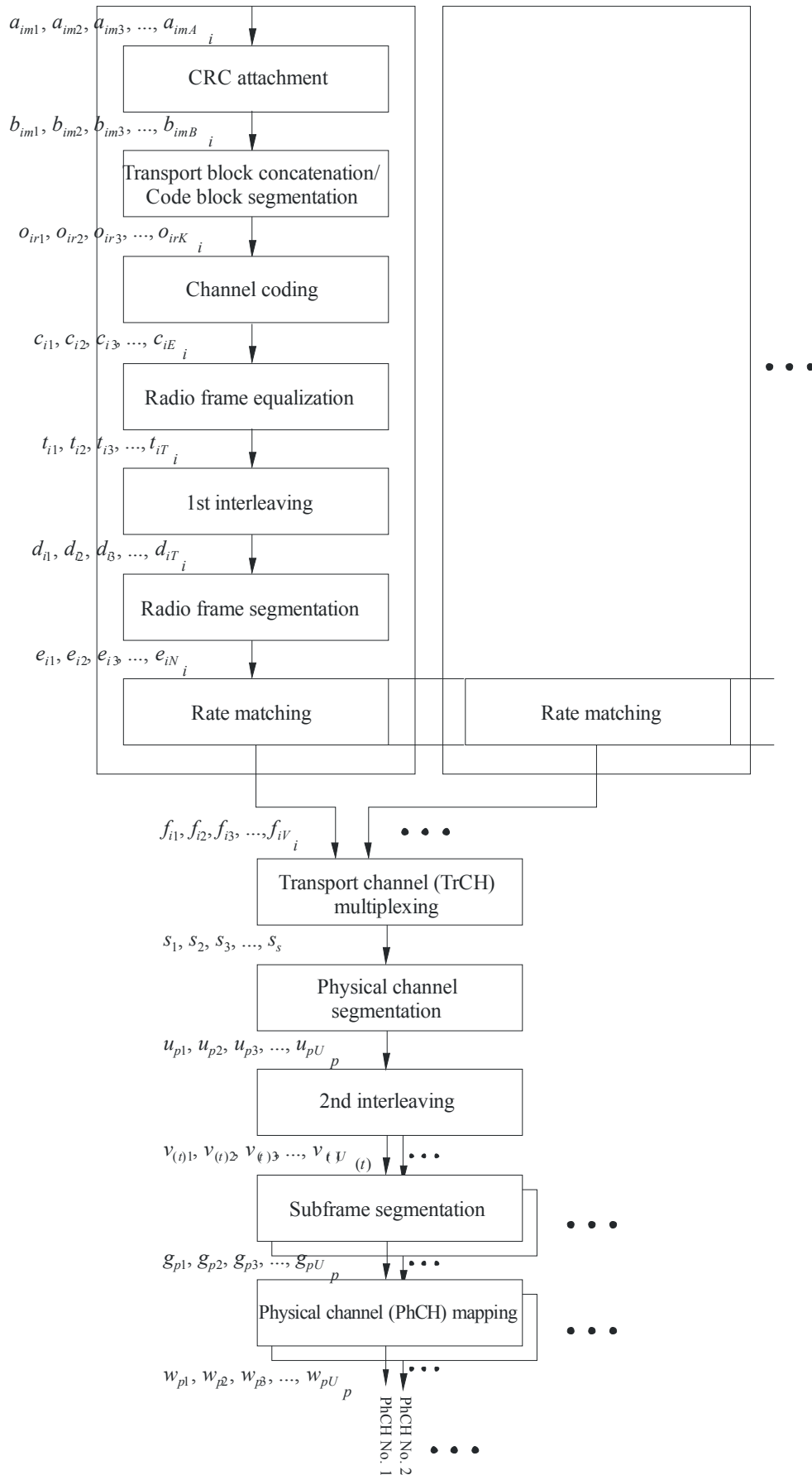
Figure 46 gives the physical layer transmission chain for the user plane data, i.e. from the level of transport channels down to the level of physical channel. Figure 46 shows how several transport channels can be multiplexed onto one or more dedicated physical channels (DPCH).

The CRC provides for error detection of the transport blocks for the particular transport channel. The CRC can take the length zero (no CRC), 8, 12, 16 or 24 bits depending on the service requirements.

The transport block concatenation and code block segmentation functionality performs serial concatenation of those transport blocks that will be sent in one transmission time interval and any code block segmentation if necessary.

FIGURE 46

Transport channel multiplexing structure



The types of channel coding defined are convolutional coding, turbo coding and no coding. Real-time services use only FEC encoding while non-real-time services use a combination of FEC and ARQ. The ARQ functionality resides in the RLC sub-layer of Layer 2. The convolutional coding rates are 1/2 or 1/3 while the rate is 1/3 for turbo codes.

The possible interleaving depths are 10, 20, 40 or 80 ms, for the RACH also 5 ms may apply. The radio frame equalization performs padding of bits. The rate matching adapts any remaining differences of the bit rate so the number of outgoing bits fit to the available bit rates of the physical channels. Repetition coding and/or puncturing is used for this purpose.

The TrCH multiplexing stage combines transport channels in a serial fashion. This is done every 10 ms. The output of this operation is also called coded composite transport channels.

If several physical channels will be used to transmit the data, the split is made in the physical channel segmentation unit.

5.3.1.3.2.2 Transport channels

The interface to the MAC sub-layer is the transport channels, see Fig. 40. The transport channels define how and with which type of characteristics the data is transferred by the physical layer. They are categorized into DCH or common channels where many UEs are sharing the latter type. Introducing an information field containing the address then does the address resolution, if needed. The physical channel itself defines a DCH. Thus no specific address is needed for the UE. Table 4 summarizes the different types of available transport channels.

TABLE 4

The defined transport channels

Transport channel	Type and direction	Used for
DCH (dedicated channel)	Dedicated; uplink and downlink	User or control information to a UE (entire cell or part of cell (lobe-forming))
BCH (broadcast channel)	Common; downlink	Broadcast system and cell specific information
FACH (forward access channel)	Common; downlink	Control information when system knows UE location or short user packets to a UE
PCH (paging channel)	Common; downlink	Control information to UEs when good sleep mode properties are needed, e.g. idle mode operation
RACH (random access channel)	Common; uplink	Control information or short user packets from an UE
DSCH (downlink shared channel)	Common; downlink	Carries dedicated user data and control information using a shared channel
HS-DSCH (high Speed Downlink shared channel)	Common; downlink	A downlink channel serving several UEs carrying dedicated control or traffic data. HS-DSCH offers the possibility for high-speed downlink packet access through the support of higher-order modulation, adaptive modulation and coding, fast channel-dependent scheduling, and hybrid ARQ with soft combining
USCH (uplink shared channel)	Common; uplink	Carries dedicated user data and control information using a shared channel
E-DCH	Common; uplink	An uplink channel serving several UEs carrying dedicated control or traffic data. E-DCH offers the possibility for high-speed uplink packet access through the support of higher-order modulation, adaptive modulation and coding, fast scheduling, and hybrid ARQ with soft combining

The RACH on the uplink is contention-based while the DCH is reservation-based.

On each transport channel, a number of *Transport Blocks* are delivered to/from the physical layer once every *Transmission Time Interval* (TTI). To each transport channel, there is an associated *Transport Format* or set of transport formats. The transport format describes the physical properties of the transport channel, such as the TTI, the number of transport blocks per TTI, the number of bits per transport blocks, the coding scheme and coding rate, and the modulation scheme.

For E-UTRAN, the following transport channels are defined.

Downlink transport channel types are:

- Broadcast Channel (BCH) characterized by:
 - fixed, pre-defined transport format;
 - requirement to be broadcast in the entire coverage area of the cell.
- Downlink Shared Channel (DL-SCH) characterized by:
 - support for HARQ;
 - support for dynamic link adaptation by varying the modulation, coding and transmit power;
 - possibility to be broadcast in the entire cell;
 - possibility to use beamforming;
 - support for both dynamic and semi-static resource allocation;
 - support for UE discontinuous reception (DRX) to enable UE power saving;
 - support for MBMS transmission (FFS).
- Paging Channel (PCH) characterized by:
 - support for UE discontinuous reception (DRX) to enable UE power saving (DRX cycle is indicated by the network to the UE);
 - requirement to be broadcast in the entire coverage area of the cell;
 - mapped to physical resources which can be used dynamically also for traffic/other control channels.
- Multicast Channel (MCH) characterized by:
 - requirement to be broadcast in the entire coverage area of the cell;
 - support for SFN combining of MBMS transmission on multiple cells;
 - support for semi-static resource allocation e.g. with a time-frame of a long cyclic prefix.

Uplink transport channel types are:

- Uplink Shared Channel (UL-SCH) characterized by:
 - possibility to use beamforming (likely no impact on specifications);
 - support for dynamic link adaptation by varying the transmit power and potentially modulation and coding;
 - support for HARQ;
 - support for both dynamic and semi-static resource allocation.
- Random Access Channel(s) (RACH) characterized by:
 - limited control information;
 - collision risk.

5.3.1.3.2.3 Transport channels to physical channel mapping

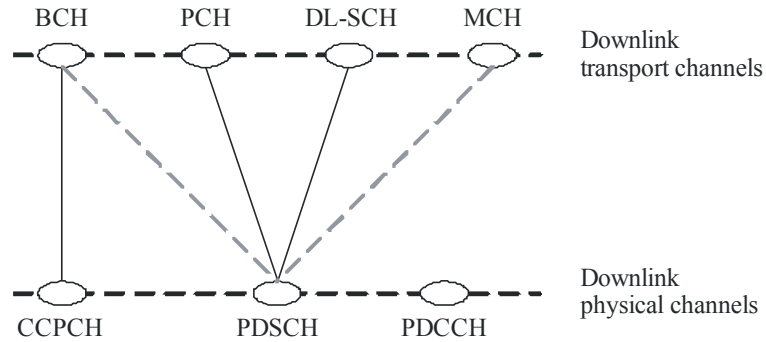
The transport channels are mapped onto the physical channels and Fig. 47 shows the different physical channels and summarizes the mapping of transport channels onto physical channels. Each physical channel has its tailored slot content. The DCH is shown in § 5.3.1.3.2.4.

FIGURE 47
Transport channel, physical channel and their mapping

Transport channels	Physical channels
DCH	Dedicated physical channel (DPCH)
BCH	Primary common control physical channels (P-CCPCH)
PCH	Secondary common control physical channels (S-CCPCH)
FACH	Secondary common control physical channels (S-CCPCH)
	MBMS notification indicator channel (MICH)
RACH	Physical random access channel (PRACH)
USCH	Physical uplink shared channel (PUSCH)
DSCH	Physical downlink shared channel (PDSCH)
HS-DSCH	High-speed-physical downlink shared channel (HS-PDSCH)
	Shared control channel for HS-DSCH (HS-SCCH)
	Shared information channel for HS-DSCH (HS-SICH)
	Downlink pilot channel (DwPCH)
	Uplink pilot channel (UpPCH)
	Fast physical access channel (FPACH)
	Paging indicator channel (PICH)
E-DCH	E-DCH physical uplink channel (E-PUCH)
	E-DCH random access uplink control channel (E-RUCCH)
	E-DCH absolute grant channel (E-AGCH)
	E-DCH hybrid ARQ indicator channel (E-HICH)

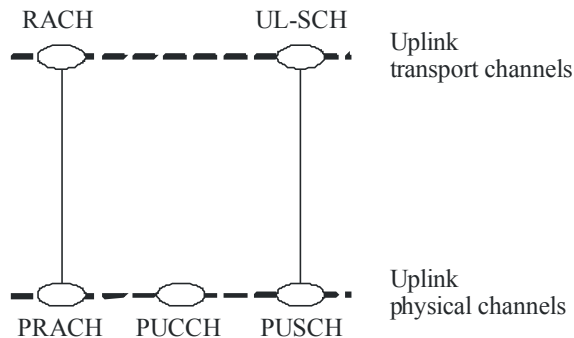
Figures 48 and 49 depict the mapping between transport and physical channels for E-UTRAN:

FIGURE 48
Mapping between downlink transport channels and downlink physical channels



M.1457-48

FIGURE 49
Mapping between uplink transport channels and uplink physical channels



M.1457-49

5.3.1.3.2.4 Frame structure

Physical channels take four-layer structure of multi-frames, radio frames, sub-frames and time slots/codes. The radio frame has a duration of 10 ms and is subdivided into 2 sub-frames of 5 ms each, and each sub-frame is then subdivided into 7 traffic time slots of 675 μ s duration each and 3 special time slots: DwPTS (downlink pilot timeslot), GP (guard period) and UpPTS (uplink pilot timeslot).

For E-UTRAN, following transport channels are defined:

Downlink transport channel types are:

- **Broadcast Channel (BCH)** characterized by:
 - fixed, pre-defined transport format;
 - requirement to be broadcast in the entire coverage area of the cell.
- **Downlink Shared Channel (DL-SCH)** characterized by:
 - support for HARQ;
 - support for dynamic link adaptation by varying the modulation, coding and transmit power;

- possibility to be broadcast in the entire cell;
- possibility to use beamforming;
- support for both dynamic and semi-static resource allocation;
- support for UE discontinuous reception (DRX) to enable UE power saving;
- support for MBMS transmission (FFS).
- **Paging Channel (PCH)** characterized by:
 - support for UE discontinuous reception (DRX) to enable UE power saving (DRX cycle is indicated by the network to the UE);
 - requirement to be broadcast in the entire coverage area of the cell;
 - mapped to physical resources which can be used dynamically also for traffic/other control channels.
- **Multicast Channel (MCH)** characterized by:
 - requirement to be broadcast in the entire coverage area of the cell;
 - support for SFN combining of MBMS transmission on multiple cells;
 - support for semi-static resource allocation e.g. with a time-frame of a long cyclic prefix.

Uplink transport channel types are:

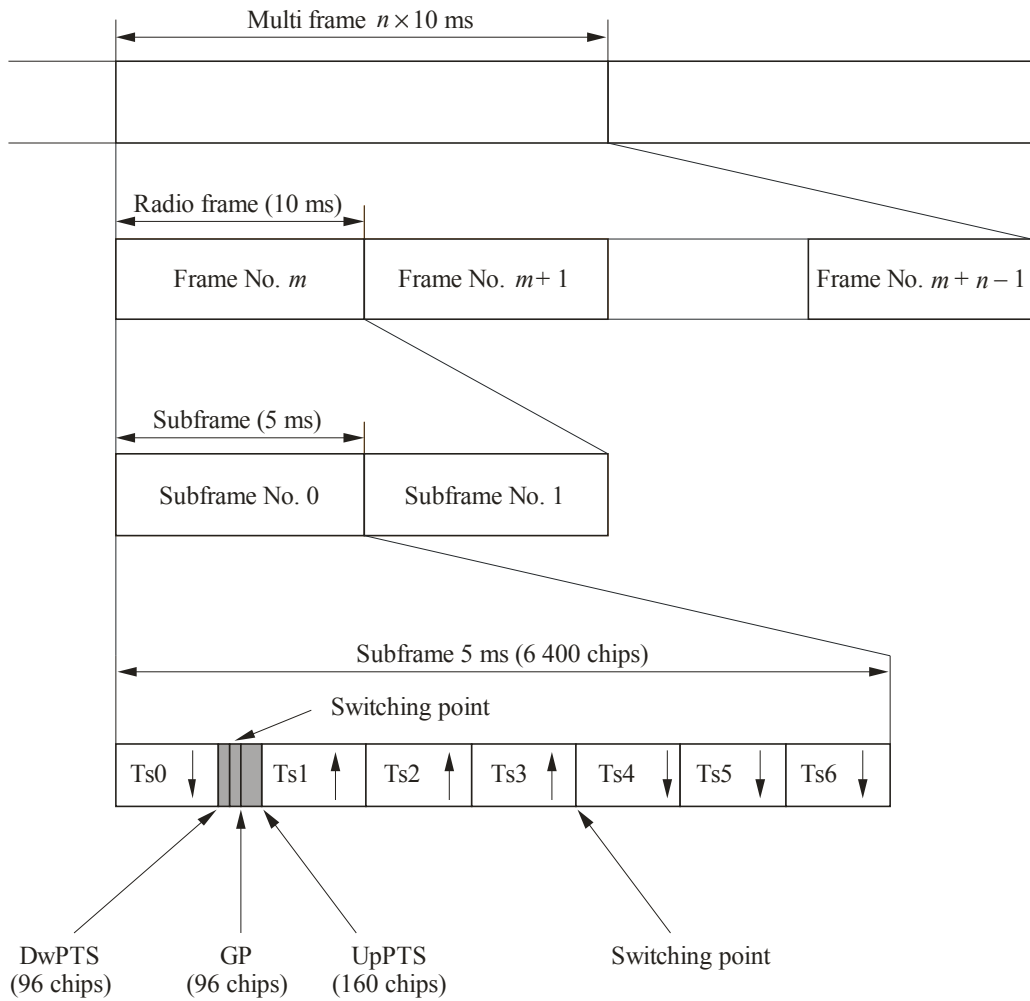
- **Uplink Shared Channel (UL-SCH)** characterized by:
 - possibility to use beamforming (likely no impact on specifications);
 - support for dynamic link adaptation by varying the transmit power and potentially modulation and coding;
 - support for HARQ;
 - support for both dynamic and semi-static resource allocation.
- **Random Access Channel(s) (RACH)** characterized by:
 - limited control information;
 - collision risk.

The burst structure is shown in Fig. 51. The burst type consists of two data symbol fields, a preamble of 144 chips and a guard period of 16 chips. The data fields of the burst type are 704 chips long. The data bits in the burst are QPSK modulated and are spread by the spreading factor of 1 to 16 in the UL and with the spreading factors 1 or 16 in the DL. The guard period is 16 chips long. 8-PSK and 16-QAM modulation may optionally be applied.

The corresponding number of symbols depends on the spreading factor as indicated in Table 5.

FIGURE 50

Frame and burst structure

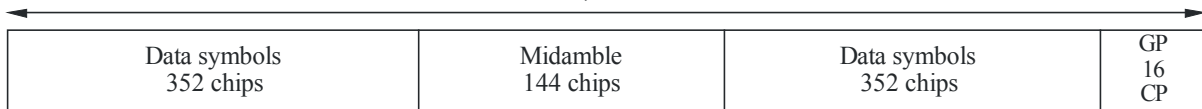


M.1457-50

FIGURE 51

Burst structure

675 μ s



M.1457-51

TABLE 5
**Number of data symbols in one burst with different SF
in the 1.28 Mchip/s TDD option**

Spreading factor, Q	Number of symbols, N , per data field in the burst
1	352
2	176
4	88
8	44
16	22

E-UTRAN TDD uses a frame structure type 2. Frame structure type 2 is applicable to TDD. Each radio frame consists of two half-frames of length $T_f = 153\,600 \times T_s = 5$ ms each. Each half-frame consists of eight slots of length $T_{slot} = 15\,360 \times T_s = 0.5$ ms and three special fields, DwPTS, GP, and UpPTS. The lengths of DwPTS and UpPTS are configurable subject to the total length of DwPTS, GP and UpPTS being equal to $30\,720 \times T_s = 1$ ms. Subframe 1 and 6 consists of DwPTS, GP and UpPTS, all other subframes are defined as two slots where subframe i consists of slots $2i$ and $2i + 1$.

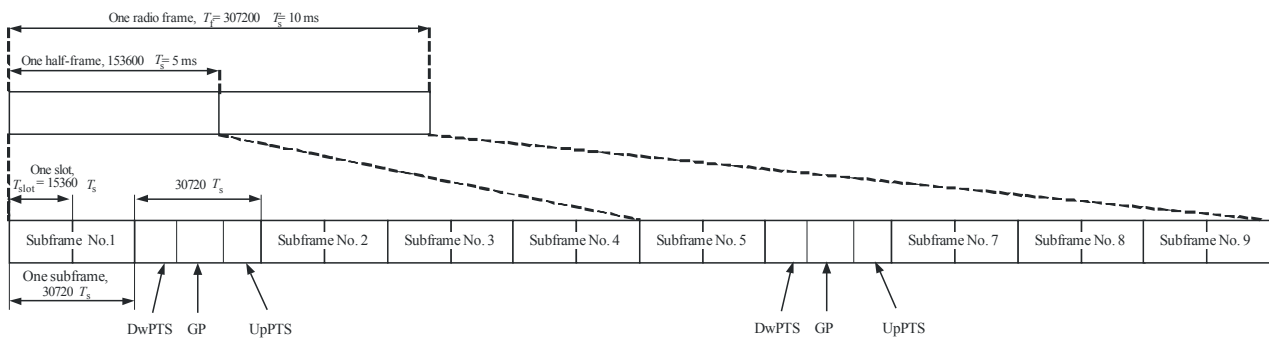
Subframes 0 and 5 and DwPTS are always reserved for downlink transmission.

Both 5 ms and 10 ms switch-point periodicity is supported.

In case of 5 ms switch-point periodicity, UpPTS and subframes 2 and 7 are reserved for uplink transmission.

In case of 10 ms switch-point periodicity, DwPTS exist in both half-frames while GP and UpPTS only exist in the first half-frame and DwPTS in the second half-frame has a length equal to $30\,720 \times T_s = 1$ ms. UpPTS and subframe 2 are reserved for uplink transmission and subframes 7 to 9 are reserved for downlink transmission.

FIGURE 52
Frame structure type 2



M.1457-52

5.3.1.3.2.5 Spreading, modulation and pulse shaping

Spreading is applied after modulation and before pulse shaping. It consists of two operations. The first is the channelization operation, which transforms every data symbol into a number of chips, thus increasing the bandwidth of the signal. The number of chips per data symbol is called the SF and is in the range of 1 to 16. The second operation is the scrambling operation, where a scrambling code is applied to the spread signal. It should be noted that the midamble part in TDD bursts is not spread.

The applied channelization codes are OVFSF-codes that preserve the distinguishability of different users. The applied scrambling code is cell-specific.

In the uplink, the applied midamble is user specific and derived from a cell-specific basic midamble sequence. In the downlink, the applied midamble is either user specific, code specific (default) or common for the whole cell.

After spreading, pulse-shaping is applied, i.e. the filters are root-raised cosine with roll-off $\alpha = 0.22$ in the frequency domain.

In E-UTRAN, the uplink radio access scheme is based on single carrier FDMA, more specifically, DFTS-OFDM. The sub-carrier spacing is 15 kHz. The baseline antenna configuration is MU-MIMO. Modulation scheme for the uplink is up to 16-QAM and optionally 64-QAM.

Downlink spreading for downlink physical channels other than the downlink DPCH is very similar. For the physical channel to which HS-DSCH and E-DCH are mapped, higher-order data modulation can be used in addition to QPSK.

The downlink radio access scheme of E-UTRAN is based on conventional OFDM using cyclic prefix. The OFDM sub-carrier spacing is 15 kHz. In addition, there is also a reduced sub-carrier spacing of 7.5 kHz only for MBMS-dedicated cell. Single-User MIMO and Multi-User MIMO with 2 and 4 transmit antennas are supported. Peak data rate of more than 100 Mbit/s can be achieved with 20 MHz bandwidth, MIMO and higher order modulation up to 64-QAM.

5.3.1.3.2.6 Transmission and reception

The frequency bands assumed for operation are unpaired frequency bands at 2 GHz. Also the system can work in other frequency bands available. Several Tx power classes for UE are being defined currently.

5.3.1.4 Layer 2

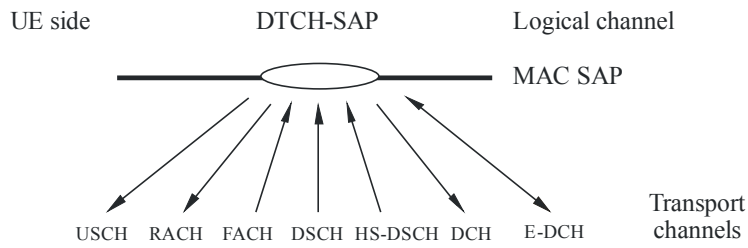
5.3.1.4.1 MAC layer

The MAC sub-layer is responsible for the handling of the data streams coming from the RLC and RRC sub-layers. It provides an unacknowledged transfer mode service to the upper layers. The interface to the RLC sub-layer is through logical channel service access points. It also re-allocates radio resources on request by the RRC sub-layer as well as provides measurements to the upper layers. The logical channels are divided into control channels and traffic channels. Thus, the functionality handles issues like:

- mapping of the different logical channels to the appropriate transport channels, selection of appropriate transport format for the transport channels based on the instantaneous source bit rate, and optimization of the HS-DSCH, DL-SCH (E-UTRA) and UL-SCH (E-UTRA) transport channel;
- multiplexing/demultiplexing of the PDUs to/from transport blocks which are thereafter further treated by the physical layer;
- dynamic switching between common and dedicated transport channels based on information from the RRC sub-layer;
- priority issues for services to one UE according to information from higher layers and physical layer (e.g. available transmit power level) as well as priority handling between UEs by means of dynamic scheduling in order to increase spectrum efficiency;
- monitoring of traffic volume that can be used by the RRC sub-layer;
- hybrid ARQ with soft combining in case of the HS-DSCH, DL-SCH (E-UTRA) or UL-SCH (E-UTRA) transport channel;
- segmentation in the case that improved L2 support for high data rates is used;
- padding (E-UTRA).

Figure 53 shows the possibilities of mapping the logical channel DTCH onto transport channels. There are possibilities to map onto common transport channels as well as dedicated transport channels. The choice of mapping could be determined on e.g. amount of traffic a user creates.

FIGURE 53

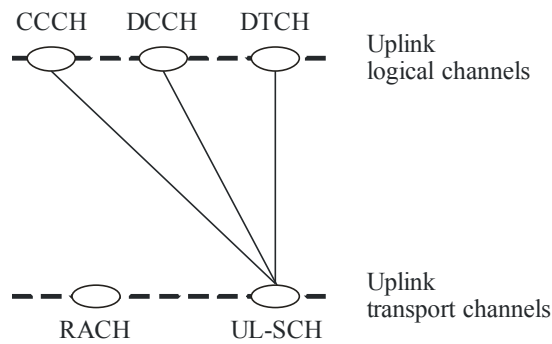


M.1457-53

Figures 54 and 55 similarly show the possibilities of mapping the logical channels onto transport channels for E-UTRA.

FIGURE 54

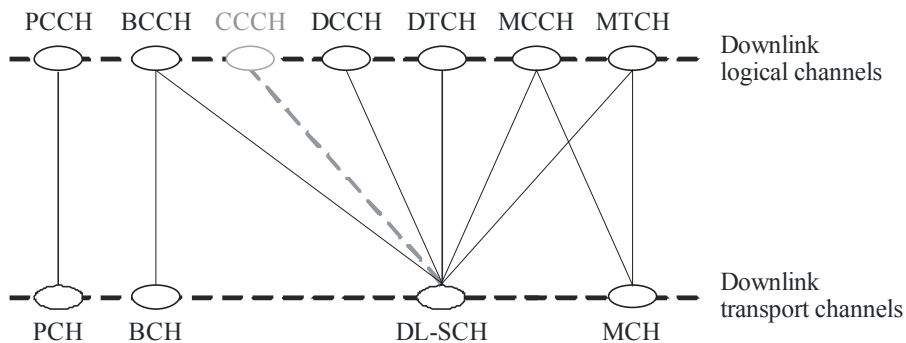
Possible transport channel mappings of the common control channel (CCCH), dedicated control channel (DCCH) and dedicated traffic channel (DTCH)



M.1457-54

FIGURE 55

Possible transport channel mappings of Paging Control Channel (PCCH), Broadcast Control Channel (BCCH), Common Control Channel (CCCH), Dedicated Control Channel (DCCH), Dedicated Traffic Channel (DTCH), Multicast Control Channel (MCCH), Multicast Traffic Channel (MTCH)



M.1457-55

5.3.1.4.2 RLC sub-layer

The RLC sub-layer provides three different types of data transfer modes:

- *Transparent data transfer* – This service transmits higher layer PDUs without adding any protocol information, possibly including segmentation/reassemble functionality.
- *Unacknowledged data transfer* – This service transmits higher layer PDUs without guaranteeing delivery to the peer entity. The unacknowledged data transfer mode has the following characteristics:
 - a) *Detection of erroneous data*: The RLC sub-layer shall deliver only those SDUs to the receiving higher layer that are free of transmission errors by using the sequence-number check function.
 - b) *Unique delivery*: The RLC sub-layer shall deliver each SDU only once to the receiving upper layer using duplication detection function.
 - c) *Immediate delivery*: The receiving RLC sub-layer entity shall deliver a SDU to the higher layer receiving entity as soon as it arrives at the receiver.
- *Acknowledged data transfer* – This service transmits higher layer PDUs and guarantees delivery to the peer entity. In case RLC is unable to deliver the data correctly, the user of RLC at the transmitting side is notified. For this service, both in-sequence and out-of-sequence delivery are supported. In many cases a higher layer protocol can restore the order of its PDUs. As long as the out-of-sequence properties of the lower layer are known and controlled (i.e. the higher layer protocol will not immediately request retransmission of a missing PDU) allowing out-of-sequence delivery can save memory space in the receiving RLC. The acknowledged data transfer mode has the following characteristics:
 - a) *Error-free delivery*: Error-free delivery is ensured by means of retransmission. The receiving RLC entity delivers only error-free SDUs to the higher layer.
 - b) *Unique delivery*: The RLC sub-layer shall deliver each SDU only once to the receiving upper layer using duplication detection function.
 - c) *In-sequence delivery*: RLC sub-layer shall provide support for in-order delivery of SDUs, i.e. RLC sub-layer should deliver SDUs to the receiving higher layer entity in the same order as the transmitting higher layer entity submits them to the RLC sub-layer.
 - d) *Out-of-sequence delivery*: Alternatively to in-sequence delivery, it shall also be possible to allow that the receiving RLC entity delivers SDUs to higher layer in different order than submitted to RLC sub-layer at the transmitting side.

It also provides for RLC connection establishment/release. As well as QoS setting and notification to higher layers in case of unrecoverable errors.

An example of the data flow for non-transparent (acknowledged/unacknowledged) data transfer is shown in Fig. 37.

5.3.1.4.3 PDCP sub-layer

PDCP provides transmission and reception of Network PDUs in acknowledged, unacknowledged and transparent RLC mode.

It is responsible for the mapping of Network PDUs from one network protocol to one RLC entity and it provides compression in the transmitting entity and decompression in the receiving entity of redundant Network PDU control information (header compression/ decompression).

For E-UTRAN, PDCP is also responsible for in-sequence delivery of upper layer PDUs at hand-over, duplicate detection of lower layer SDUs and retransmission of PDCP SDUs at handover.

5.3.1.4.4 BMC sub-layer

The BMC provides a broadcast/multicast transmission service in the user plane on the radio interface for common user data in transparent or unacknowledged mode.

It can handle functionalities such as storage, scheduling and transmission of BMC messages.

5.3.1.5 Layer 3 (radio resource control sub-layer)

The radio resource control (RRC) sub-layer handles the control plane signalling of Layer 3 between the UEs and the radio access network. In addition to the relation with the upper layers (such as core network) the following main functions are performed:

- *Broadcast of information provided by the non-access stratum (core network)* – The RRC layer performs system information broadcasting from the network to all UEs. The system information is normally repeated on a regular basis. This function supports broadcast of higher layer (above RRC) information. This information may be cell specific or not. As an example RRC may broadcast core network location service area information related to some specific cells.
- *Broadcast of information related to the access stratum* – The RRC layer performs system information broadcasting from the network to all UEs. This function supports broadcast of typically cell-specific information.
- *Establishment, maintenance and release of an RRC connection between the UE and this radio interface* – The establishment of an RRC connection is initiated by a request from higher layers at the UE side to establish the first signalling connection for the UE. The establishment of an RRC connection includes an optional cell re-selection, an admission control, and a Layer 2 signalling link establishment.
- *Establishment, reconfiguration and release of radio access bearers* – The RRC layer will, on request from higher layers, perform the establishment, reconfiguration and release of radio access bearers in the user plane. A number of radio access bearers can be established to an UE at the same time. At establishment and reconfiguration, the RRC layer performs admission control and selects parameters describing the radio access bearer processing in Layer 2 and Layer 1, based on information from higher layers.
- *Assignment, reconfiguration and release of radio resources for the RRC connection* – The RRC layer handles the assignment of radio resources (e.g. codes and, for TDD only, time slots) needed for the RRC connection including needs from both the control and user plane. The RRC layer may reconfigure radio resources during an established RRC connection. This function includes coordination of the radio resource allocation between multiple radio bearers related to the same RRC connection. RRC controls the radio resources in the uplink and downlink such that UE and the radio access network can communicate using unbalanced radio resources (asymmetric uplink and downlink). RRC signals to the UE to indicate resource allocations for purposes of handover to GSM or other radio systems.
- *RRC connection mobility functions* – The RRC layer performs evaluation, decision and execution related to RRC connection mobility during an established RRC connection, such as handover, preparation of handover to GSM or other systems, cell re-selection and cell/ paging area update procedures, based on e.g. measurements done by the UE.
- *Paging/notification* – The RRC layer can broadcast paging information from the network to selected UEs. The RRC layer can also initiate paging during an established RRC connection.
- *Control of requested QoS* – This function ensures that the QoS requested for the radio access bearers can be met. This includes the allocation of a sufficient number of radio resources.
- *UE measurement reporting and control of the reporting* – The measurements performed by the UE are controlled by the RRC layer, in terms of what to measure, when to measure and how to report, including both this radio interface and other systems. The RRC layer also performs the reporting of the measurements from the UE to the network.
- *Outer loop power control* – The RRC layer controls setting of the target of the closed-loop power control.
- *Control of ciphering* – The RRC layer provides procedures for setting of ciphering (on/off) between the UE and the radio access network.
- *Initial cell selection and re-selection in idle mode* – Selection of the most suitable cell based on idle mode measurements and cell selection criteria.

- *Arbitration of the radio resource allocation between the cells* – This function shall ensure optimal performance of the overall radio access network capacity.
- *Slow DCA* – Allocation of preferred radio resources based on long-term decision criteria.
- *Timing advance control* – The RRC controls the operation of timing advance.

5.3.1.6 Summary of major technical parameters

Parameter	Value	Reference to § 5.3.2
Multiple access technique and duplexing scheme	Multiple access: TDMA/CDMA (E-UTRAN) OFDM in DL. SC-FDMA in UL Duplexing: TDD	5.3.2.1.1 5.3.2.3.1
Chip rate (Mchip/s)	3.84 Mchip/sTDD option: 3.84 7.68 Mchip/s TDD option: 7.68 1.28 Mchip/sTDD option: 1.28	5.3.2.1.4
Frame length and structure	3.84 Mchip/sTDD option: Frame length: 10 ms 15 slots per frame, each 666.666 μ s 7.68 Mchip/s TDD option: Frame length: 10 ms 15 slots per frame, each 666.666 μ s 1.28 Mchip/s TDD option: Frame length: 10 ms Sub-frame length: 5 ms 7 main slots per sub-frame, each 675 μ s (E-UTRAN) Sub-frame length; 1 ms (E-UTRAN) Slot length 0.5 ms TTI: 10 ms, 20 ms, 40 ms, 80 ms, 5 ms (HS-DSCH, E-DCH and PRACH, 1.28 Mchip/s option only) (E-UTRAN) 1 ms	5.3.2.1.2 5.3.2.3.1
Occupied bandwidth (MHz)	3.84 Mchip/sTDD option: Less than 5 7.68 Mchip/s TDD option: Less than 10 1.28 Mchip/sTDD option: Less than 1.6 (E-UTRAN) 1.4 MHz, 3 MHz, 10 MHz, 15 MHz and 20 MHz	5.3.2.5.1 5.3.2.5.3 5.3.2.3.1
Adjacent channel leakage power ratio (ACLR) (transmitter side)	3.84 Mchip/sTDD option: UE (UE power class: 21 dBm, 24 dBm) ACLR (5 MHz) = 33 dB ACLR (10 MHz) = 43 dB BS: ACLR (5 MHz) = 45 dB ACLR (10 MHz) = 55 dB 7.68 Mchip/s TDD option: UE (UE power class: 21 dBm, 24 dBm) ACLR (10 MHz) = 33 dB ACLR (20 MHz) = 43 dB BS: ACLR (10 MHz) = 45 dB ACLR (20 MHz) = 55 dB 1.28 Mchip/sTDD option: UE (UE power class: 21 dBm, 24 dBm) ACLR (1.6 MHz) = 33 dB ACLR (3.2 MHz) = 43 dB BS: ACLR (1.6 MHz) = 40 dB ACLR (3.2 MHz) = 45 dB	5.3.2.5.1 5.3.2.5.3

Parameter	Value	Reference to § 5.3.2
Adjacent channel selectivity (ACS) (receiver side)	3.84 Mchip/s TDD option: UE: (UE power class; 21 dBm, 24 dBm) ACS (5 MHz) = 33 dB BS: ACS (5 MHz) = 45 dB 7.68 Mchip/s TDD option: UE: (UE power class; 21 dBm, 24 dBm) ACS (10 MHz) = 33 dB BS: ACS (10 MHz) = 45 dB 1.28 Mchip/sTDD option: UE: (UE power class; 21 dBm, 24 dBm) ACS (1.6 MHz) = 33 dB BS: ACS (1.6 MHz) = 45 dB	5.3.2.5.1 5.3.2.5.3
Random access mechanism	3.84 Mchip/s and 7.68 Mchip/s TDD options: RACH burst on dedicated uplink slot(s) 1.28 Mchip/sTDD option: Two step random-access with fast physical layer signaling	5.3.2.1.2, 5.3.2.1.5
Channel estimation	Midambles are used for channel estimation	5.3.2.1.2
Inter-base station asynchronous/ synchronous operation	Synchronous operation	5.3.2.1.5 5.3.2.5.3

5.3.2 Detailed specification of the radio interface

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at <http://ties.itu.int/u/itu-r/ede/rsg5/IMT-2000/GCS/GCSrev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their Web site.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

5.3.2.1 25.200 series

5.3.2.1.1 TS 25.201

Physical layer – General description

This specification gives a general description of the physical layer of the UTRA radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.201	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25201-340.pdf
ATIS	T1.3GPP.25.201V340-2003	3.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.201	3.4.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 201	3.4.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v340
TTA	TTAT.3G-25.201(R99-3.4.0)	3.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R99-3.4.0)
Release 4					
ARIB	ARIB STD-T63-25.201	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25201-430.pdf
ATIS	T1.3GPP.25.201V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.201	4.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 201	4.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v430
TTA	TTAT.3G-25.201(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-25.201	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25201-530.pdf
ATIS	ATIS.3GPP.25.201V530-2006	5.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.201	5.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 201	5.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v530
TTA	TTAT.3G-25.201(R5-5.3.0)	5.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R5-5.3.0)
Release 6					
ARIB	ARIB STD-T63-25.201	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25201-620.pdf
ATIS	ATIS.3GPP.25.201V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.201	6.2.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 201	6.2.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v620
TTA	TTAT.3G-25.201(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-25.201	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25201-750.pdf
ATIS	ATIS.3GPP.25.201V750-2008	7.5.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.201	7.5.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 201	7.5.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v750
TTA	TTAT.3G-25.201(R7-7.5.0)	7.5.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-25.201	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25201-810.pdf
ATIS	ATIS.3GPP.25.201V810-2008	8.1.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.201	8.1.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 201	8.1.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125201v810
TTA	TTAT.3G-25.201(R8-8.1.0)	8.1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.201(R8-8.1.0)

5.3.2.1.2 TS 25.202**7.68Mcps Time Division Duplex (TDD) option ; Overall description: Stage 2**

The present document is the overall technical specification for the support of the 7.68Mcps TDD option in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ARIB	ARIB STD-T63-25.202	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25202-710.pdf
CCSA	CCSA-TSD-TDD-25.202	7.1.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 202	7.1.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125202v710
Release 8					
ATIS	ATIS.3GPP.25.202V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.202	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 202	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125202v800

5.3.2.1.3 S 25.221**Physical channels and mapping of transport channels onto physical channels (TDD)**

This specification describes the characteristics of the Layer 1 transport channels and physical channel in the TDD mode of UTRA. The main objectives of the document are to be a part of the full description of the UTRA Layer 1, and to serve as a basis for the drafting of the actual technical specification (TS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.221	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25221-3b0.pdf
ATIS	ATIS.3GPP.25.221V3110-2006	3.11.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.221	3.11.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 221	3.11.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125221v3b0

Release 4

ARIB	ARIB STD-T63-25.221	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25221-480.pdf
ATIS	ATIS.3GPP.25.221V480-2006	4.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.221	4.8.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 221	4.8.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125221v480

Release 5

ARIB	ARIB STD-T63-25.221	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25221-570.pdf
ATIS	ATIS.3GPP.25.221V570-2009	5.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.221	5.7.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 221	5.7.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125221v570

Release 6

ARIB	ARIB STD-T63-25.221	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25221-660.pdf
ATIS	ATIS.3GPP.25.221V660-2009	6.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.221	6.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 221	6.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125221v660

Release 7

ARIB	ARIB STD-T63-25.221	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25221-7a0.pdf
ATIS	ATIS.3GPP.25.221V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.221	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 221	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125221v7a0

Release 8

ATIS	ATIS.3GPP.25.221V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.221	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 221	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125221v840

5.3.2.1.4 TS 25.222**Multiplexing and channel coding (TDD)**

This specification describes multiplexing, channel coding and interleaving for UTRA physical layer TDD mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.222	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25222-3a0.pdf
ATIS	T1.3GPP.25.222V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.222	3.10.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 222	3.10.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125222v3a0
Release 4					
ARIB	ARIB STD-T63-25.222	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25222-480.pdf
ATIS	ATIS.3GPP.25.222V480-2005	4.8.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.222	4.8.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 222	4.8.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125222v480

Release 5

ARIB	ARIB STD-T63-25.222	5.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25222-580.pdf
ATIS	ATIS.3GPP.25.222V580-2009	5.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.222	5.8.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 222	5.8.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125222v580

Release 6

ARIB	ARIB STD-T63-25.222	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25222-630.pdf
ATIS	ATIS.3GPP.25.222V630-2009	6.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.222	6.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 222	6.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125222v630

Release 7

ARIB	ARIB STD-T63-25.222	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25222-7a0.pdf
ATIS	ATIS.3GPP.25.222V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.222	7.10.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 222	7.10.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125222v7a0

Release 8

ATIS	ATIS.3GPP.25.222V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.222	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 222	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125222v840

5.3.2.1.5 TS 25.223**Spreading and modulation (TDD)**

This specification describes the characteristics of the spreading and modulation in the TDD mode. The main objectives of the document are to be a part of the full description of the Layer 1, and to serve as a basis for the drafting of the actual technical specification (TS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.223	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25223-380.pdf
ATIS	T1.3GPP.25.223V380-2002	3.8.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.223	3.8.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 223	3.8.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125223UR7
Release 4					
ARIB	ARIB STD-T63-25.223	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25223-450.pdf
ATIS	T1.3GPP.25.223V450-2003	4.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.223	4.5.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 223	4.5.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125223v450
Release 5					
ARIB	ARIB STD-T63-25.223	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25223-530.pdf
ATIS	T1.3GPP.25.223V530-2004	5.3.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.223	5.3.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 223	5.3.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125223v530

Release 6

ARIB	ARIB STD-T63-25.223	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25223-610.pdf
ATIS	ATIS.3GPP.25.223V610-2006	6.1.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.223	6.1.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 223	6.1.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125223v610

Release 7

ARIB	ARIB STD-T63-25.223	7.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25223-770.pdf
ATIS	ATIS.3GPP.25.223V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.223	7.7.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 223	7.7.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125223v770

Release 8

ATIS	ATIS.3GPP.25.223V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.223	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 223	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125223v830

5.3.2.1.6 TS 25.224**Physical layer procedures (TDD)**

This specification describes the physical layer procedures in the TDD mode of UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.224	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25224-3d0.pdf
ATIS	T1.3GPP.25.224V3130-2004	3.13.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.224	3.13.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 224	3.13.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125224v3d0
Release 4					
ARIB	ARIB STD-T63-25.224	4.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25224-4b0.pdf
ATIS	ATIS.3GPP.25.224V4110-2005	4.11.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.224	4.11.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 224	4.11.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125224v4b0
Release 5					
ARIB	ARIB STD-T63-25.224	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25224-590.pdf
ATIS	ATIS.3GPP.25.224V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.224	5.9.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 224	5.9.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125224v590
Release 6					
ARIB	ARIB STD-T63-25.224	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25224-670.pdf
ATIS	ATIS.3GPP.25.224V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.224	6.7.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 224	6.7.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125224v670

Release 7

ARIB	ARIB STD-T63-25.224	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25224-7a0.pdf
ATIS	ATIS.3GPP.25.224V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.224	7.10.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 224	7.10.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125224v7a0

Release 8

ATIS	ATIS.3GPP.25.224V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.224	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 224	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125224v830

5.3.2.1.7 TS 25.225**Physical layer – Measurements (TDD)**

This specification describes the description of the measurements done at the UE and network in order to support operation in idle mode and connected mode for TDD mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.225	3.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25225-3c0.pdf
ATIS	T1.3GPP.25.225V3120-2004	3.12.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.225	3.12.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 225	3.12.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125225v3c0
Release 4					
ARIB	ARIB STD-T63-25.225	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25225-480.pdf
ATIS	ATIS.3GPP.25.225V480-2005	4.8.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.225	4.8.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 225	4.8.0	Published	May 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125225v480
Release 5					
ARIB	ARIB STD-T63-25.225	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25225-570.pdf
ATIS	ATIS.3GPP.25.225V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.225	5.7.0	Published	May 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 225	5.7.0	Published	May 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125225v570
Release 6					
ARIB	ARIB STD-T63-25.225	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25225-630.pdf
ATIS	ATIS.3GPP.25.225V630-2007	6.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.225	6.3.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 225	6.3.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125225v630
Release 7					
ARIB	ARIB STD-T63-25.225	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25225-740.pdf
ATIS	ATIS.3GPP.25.225V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.225	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 225	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125225v740

Release 8

ATIS	ATIS.3GPP.25.225V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.225	8.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 225	8.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0125225v820

5.3.2.2 25.300 series

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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5.3.2.2.1 TS 25.301**Radio interface protocol architecture**

This specification describes an overview and overall description of the UE-UTRAN radio interface protocol architecture. Details of the radio protocols will be specified in companion documents.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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Release 99

ARIB	ARIB STD-T63-25.301	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25301-3b0.pdf
ATIS	T1.3GPP.25.301V3110-2003	3.11.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.301	3.11.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 301	3.11.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v3b0
TTA	TTAT.3G-25.301(R99-3.11.0)	3.11.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R99-3.11.0)

Release 4

ARIB	ARIB STD-T63-25.301	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25301-440.pdf
ATIS	T1.3GPP.25.301V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.301	4.4.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 301	4.4.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v440
TTA	TTAT.3G-25.301(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R4-4.4.0)

Release 5

ARIB	ARIB STD-T63-25.301	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25301-560.pdf
ATIS	ATIS.3GPP.25.301V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.301	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 301	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v560
TTA	TTAT.3G-25.301(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-25.301	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25301-660.pdf
ATIS	ATIS.3GPP.25.301V660-2008	6.6.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.301	6.6.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 301	6.6.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v660
TTA	TTAT.3G-25.301(R6-6.6.0)	6.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R6-6.6.0)

Release 7

ARIB	ARIB STD-T63-25.301	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25301-740.pdf
ATIS	ATIS.3GPP.25.301V740-2008	7.4.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.301	7.4.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 301	7.4.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v740
TTA	TTAT.3G-25.301(R7-7.4.0)	7.4.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R7-7.4.0)

Release 8

ARIB	ARIB STD-T63-25.301	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25301-850.pdf
ATIS	ATIS.3GPP.25.301V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.301	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 301	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225301v850
TTA	TTAT.3G-25.301(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.301(R8-8.5.0)

5.3.2.2.2 TS 25.302**Services provided by the physical layer**

This specification describes a technical specification of the services provided by the physical layer of UTRA to upper layers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.302	3.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25302-3g0.pdf
ATIS	T1.3GPP.25.302V3160-2004	3.16.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.302	3.16.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 302	3.16.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v3g0
TTA	TTAT.3G-25.302(R99-3.16.0)	3.16.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R99-3.16.0)
Release 4					
ARIB	ARIB STD-T63-25.302	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25302-480.pdf
ATIS	T1.3GPP.25.302V480-2004	4.8.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.302	4.8.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 302	4.8.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v480
TTA	TTAT.3G-25.302(R4-4.8.0)	4.8.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R4-4.8.0)
Release 5					
ARIB	ARIB STD-T63-25.302	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25302-590.pdf
ATIS	ATIS.3GPP.25.302V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.302	5.9.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 302	5.9.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v590
TTA	TTAT.3G-25.302(R5-5.9.0)	5.9.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R5-5.9.0)
Release 6					
ARIB	ARIB STD-T63-25.302	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25302-680.pdf
ATIS	ATIS.3GPP.25.302V680-2007	6.8.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.302	6.8.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 302	6.8.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v680
TTA	TTAT.3G-25.302(R6-6.8.0)	6.8.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R6-6.8.0)

Release 7

ARIB	ARIB STD-T63-25.302	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25302-760.pdf
ATIS	ATIS.3GPP.25.302V760-2008	7.6.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.302	7.6.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 302	7.6.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v760
TTA	TTAT.3G-25.302(R7-7.6.0)	7.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R7-7.6.0)

Release 8

ARIB	ARIB STD-T63-25.302	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25302-820.pdf
ATIS	ATIS.3GPP.25.302V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.302	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 302	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225302v820
TTA	TTAT.3G-25.302(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.302(R8-8.2.0)

5.3.2.2.3 TS 25.303**Interlayer procedures in connected mode**

This specification describes informative interlayer procedures to perform the required tasks. This specification attempts to provide a comprehensive overview of the different states and transitions within the connected mode of universal mobile telecommunications system (UMTS) terminal.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.303	3.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25303-3c0.pdf
ATIS	T1.3GPP.25.303V3120-2003	3.12.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.303	3.12.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 303	3.12.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v3c0
TTA	TTAT.3G-25.303(R99-3.12.0)	3.12.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R99-3.12.0)
Release 4					
ARIB	ARIB STD-T63-25.303	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25303-450.pdf
ATIS	T1.3GPP.25.303V450-2003	4.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.303	4.5.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 303	4.5.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v450
TTA	TTAT.3G-25.303(R4-4.5.0)	4.5.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R4-4.5.0)
Release 5					
ARIB	ARIB STD-T63-25.303	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25303-530.pdf
ATIS	ATIS.3GPP.25.303V530-2006	5.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.303	5.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 303	5.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v530
TTA	TTAT.3G-25.303(R5-5.3.0)	5.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R5-5.3.0)
Release 6					
ARIB	ARIB STD-T63-25.303	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25303-630.pdf
ATIS	ATIS.3GPP.25.303V630-2006	6.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.303	6.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 303	6.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v630
TTA	TTAT.3G-25.303(R6-6.3.0)	6.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R6-6.3.0)

Release 7

ARIB	ARIB STD-T63-25.303	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25303-700.pdf
ATIS	ATIS.3GPP.25.303V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.303	7.0.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 303	7.0.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v700
TTA	TTAT.3G-25.303(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-25.303	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25303-800.pdf
ATIS	ATIS.3GPP.25.303V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.303	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 303	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225303v800
TTA	TTAT.3G-25.303(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.303(R8-8.0.0)

5.3.2.2.4 TS 25.304**UE procedures in idle mode and procedures for cell reselection in connected mode**

This specification describes the overall idle mode process for the UE and the functional division between the non-access stratum and access stratum in the UE. The UE is in idle mode when the connection of the UE is closed on all layers, e.g. there is neither an MM connection nor an RRC connection. This specification presents also examples of inter-layer procedures related to the idle mode processes and describes idle mode functionality of a dual mode UMTS/GSM UE.

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Release 99					
ARIB	ARIB STD-T63-25.304	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25304-3e0.pdf
ATIS	ATIS.3GPP.25.304V3140-2005	3.14.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.304	3.14.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 304	3.14.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v3e0
TTA	TTAT.3G-25.304(R99-3.14.0)	3.14.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R99-3.14.0)
Release 4					
ARIB	ARIB STD-T63-25.304	4.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25304-480.pdf
ATIS	ATIS.3GPP.25.304V480-2005	4.8.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.304	4.8.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 304	4.8.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v480
TTA	TTAT.3G-25.304(R4-4.8.0)	4.8.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R4-4.8.0)
Release 5					
ARIB	ARIB STD-T63-25.304	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25304-590.pdf
ATIS	ATIS.3GPP.25.304V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.304	5.9.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 304	5.9.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v590
TTA	TTAT.3G-25.304(R5-5.9.0)	5.9.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-25.304	6.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25304-6a0.pdf
ATIS	ATIS.3GPP.25.304V6100-2008	6.10.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.304	6.10.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 304	6.10.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v6a0
TTA	TTAT.3G-25.304(R6-6.10.0)	6.10.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R6-6.10.0)

Release 7

ARIB	ARIB STD-T63-25.304	7.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25304-770.pdf
ATIS	ATIS.3GPP.25.304V770-2009	7.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.304	7.7.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 304	7.7.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v770
TTA	TTAT.3G-25.304(R7-7.7.0)	7.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R7-7.7.0)

Release 8

ARIB	ARIB STD-T63-25.304	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25304-850.pdf
ATIS	ATIS.3GPP.25.304V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.304	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 304	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225304v850
TTA	TTAT.3G-25.304(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.304(R8-8.5.0)

5.3.2.2.5 TS 25.305**Stage 2 Functional Specification of UE positioning in UTRAN (LCS)**

This document specifies the Stage 2 of the UE Positioning function of UTRAN, which provides the mechanisms to support the calculation of the geographical position of a UE.

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Release 99					
ARIB	ARIB STD-T63-25.305	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25305-3b0.pdf
ATIS	T1.3GPP.25.305V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.305	3.11.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 305	3.11.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v3b0
TTA	TTAT.3G-25.305(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.305	4.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25305-470.pdf
ATIS	T1.3GPP.25.305V470-2004	4.7.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.305	4.7.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 305	4.7.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v470
TTA	TTAT.3G-25.305(R4-4.7.0)	4.7.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R4-4.7.0)
Release 5					
ATIS	ATIS.3GPP.25.305V590-2005	5.9.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.305	5.9.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 305	5.9.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v590
TTA	TTAT.3G-25.305(R5-5.9.0)	5.9.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-25.305	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25305-610.pdf
ATIS	ATIS.3GPP.25.305V610-2005	6.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.305	6.1.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 305	6.1.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v610
TTA	TTAT.3G-25.305(R6-6.1.0)	6.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R6-6.1.0)

Release 7

ARIB	ARIB STD-T63-25.305	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25305-740.pdf
ATIS	ATIS.3GPP.25.305V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.305	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 305	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v740
TTA	TTAT.3G-25.305(R7-7.4.0)	7.4.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R7-7.4.0)

Release 8

ARIB	ARIB STD-T63-25.305	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25305-810.pdf
ATIS	ATIS.3GPP.25.305V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.305	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 305	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225305v810
TTA	TTAT.3G-25.305(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.305(R8-8.1.0)

5.3.2.2.6 TS 25.306**UE Radio Access capabilities definition**

This document identifies the parameters of the access stratum part of the UE radio access capabilities. Furthermore, some reference configurations of these values are defined. The intention is that these configurations will be used for test specifications.

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Release 99					
ARIB	ARIB STD-T63-25.306	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25306-3a0.pdf
ATIS	T1.3GPP.25.306V3100-2004	3.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.306	3.10.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 306	3.10.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v3a0
TTA	TTAT.3G-25.306(R99-3.10.0)	3.10.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-25.306	4.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25306-4b0.pdf
ATIS	ATIS.3GPP.25.306V4110-2009	4.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.306	4.11.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 306	4.11.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v4b0
TTA	TTAT.3G-25.306(R4-4.11.0)	4.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R4-4.11.0)
Release 5					
ARIB	ARIB STD-T63-25.306	5.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25306-5f0.pdf
ATIS	ATIS.3GPP.25.306V5150-2009	5.15.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.306	5.15.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 306	5.15.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v5f0
TTA	TTAT.3G-25.306(R5-5.15.0)	5.15.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R5-5.15.0)

Release 6

ARIB	ARIB STD-T63-25.306	6.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25306-6d0.pdf
ATIS	ATIS.3GPP.25.306V6130-2009	6.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.306	6.13.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 306	6.13.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v6d0
TTA	TTAT.3G-25.306(R6-6.13.0)	6.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R6-6.13.0)

Release 7

ARIB	ARIB STD-T63-25.306	7.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25306-790.pdf
ATIS	ATIS.3GPP.25.306V790-2009	7.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.306	7.9.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 306	7.9.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v790
TTA	TTAT.3G-25.306(R7-7.9.0)	7.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R7-7.9.0)

Release 8

ARIB	ARIB STD-T63-25.306	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25306-860.pdf
ATIS	ATIS.3GPP.25.306V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.306	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 306	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225306v860
TTA	TTAT.3G-25.306(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.306(R8-8.6.0)

5.3.2.2.7 TS 25.307**Requirements on UE supporting a release-independent frequency band**

This document specifies requirements on UEs supporting a frequency band that is independent of release.

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Release 99					
ARIB	ARIB STD-T63-25.307	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25307-3b0.pdf
ATIS	ATIS.3GPP.25.307V3110-2008	3.11.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.307	3.11.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 307	3.11.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v3b0
TTA	TTAT.3G-25.307(R99-3.11.0)	3.11.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.307	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25307-4d0.pdf
ATIS	ATIS.3GPP.25.307V4130-2009	4.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.307	4.13.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 307	4.13.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v4d0
TTA	TTAT.3G-25.307(R4-4.13.0)	4.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R4-4.13.0)
Release 5					
ARIB	ARIB STD-T63-25.307	5.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25307-5c0.pdf
ATIS	ATIS.3GPP.25.307V5120-2009	5.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.307	5.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 307	5.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v5c0
TTA	TTAT.3G-25.307(R5-5.12.0)	5.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R5-5.12.0)

Release 6

ARIB	ARIB STD-T63-25.307	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25307-690.pdf
ATIS	ATIS.3GPP.25.307V690-2009	6.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.307	6.9.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 307	6.9.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v690
TTA	TTAT.3G-25.307(R6-6.9.0)	6.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-25.307	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25307-750.pdf
ATIS	ATIS.3GPP.25.307V750-2009	7.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.307	7.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 307	7.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v750
TTA	TTAT.3G-25.307(R7-7.5.0)	7.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-25.307	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25307-830.pdf
ATIS	ATIS.3GPP.25.307V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.307	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 307	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225307v830
TTA	TTAT.3G-25.307(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.307(R8-8.3.0)

5.3.2.2.8 TS 25.308**UTRA High Speed Downlink Packet Access – Overall Description (Stage 2)**

This document is a technical specification of the overall support of High Speed Downlink Packet Access in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.308	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25308-570.pdf
ATIS	ATIS.3GPP.25.308V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.308	5.7.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 308	5.7.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v570
TTA	TTAT.3G-25.308(R5-5.7.0)	5.7.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R5-5.7.0)
Release 6					
ARIB	ARIB STD-T63-25.308	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25308-640.pdf
ATIS	ATIS.3GPP.25.308V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.308	6.4.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 308	6.4.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v640
TTA	TTAT.3G-25.308(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R6-6.4.0)
Release 7					
ARIB	ARIB STD-T63-25.308	7.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25308-790.pdf
ATIS	ATIS.3GPP.25.308V790-2009	7.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.308	7.9.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 308	7.9.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v790
TTA	TTAT.3G-25.308(R7-7.9.0)	7.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R7-7.9.0)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-25.308	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25308-850.pdf
ATIS	ATIS.3GPP.25.308V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.308	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 308	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225308v850
TTA	TTAT.3G-25.308(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.308(R8-8.5.0)

5.3.2.2.9 TS 25.319**UTRA Enhanced Uplink; Overall Description; Stage 2**

This document is a technical specification of the overall support of FDD and TDD Enhanced Uplink in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 4					
ATIS	ATIS.3GPP.25.321V4100-2005	4.10.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
Release 7					
ARIB	ARIB STD-T63-25.319	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25319-760.pdf
ATIS	ATIS.3GPP.25.319V760-2008	7.6.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.319	7.6.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 319	7.6.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225319v760
TTA	TTAT.3G-25.319(R7-7.6.0)	7.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.319(R7-7.6.0)
Release 8					
ARIB	ARIB STD-T63-25.319	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25319-850.pdf
ATIS	ATIS.3GPP.25.319V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.319	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 319	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225319v850
TTA	TTAT.3G-25.319(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.319(R8-8.5.0)

5.3.2.2.10 TS 25.321**Medium access control (MAC) protocol specification**

This specification describes the MAC protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.321	3.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25321-3h0.pdf
ATIS	ATIS.3GPP.25.321V3170-2005	3.17.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.321	3.17.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 321	3.17.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v3h0
TTA	TTAT.3G-25.321(R99-3.17.0)	3.17.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R99-3.17.0)

Release 4

ARIB	ARIB STD-T63-25.321	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25321-4a0.pdf
CCSA	CCSA-TSD-TDD-25.321	4.10.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 321	4.10.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v4a0
TTA	TTAT.3G-25.321(R4-4.10.0)	4.10.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R4-4.10.0)

Release 5

ARIB	ARIB STD-T63-25.321	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25321-5e0.pdf
ATIS	ATIS.3GPP.25.321V5140-2009	5.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.321	5.14.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 321	5.14.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v5e0
TTA	TTAT.3G-25.321(R5-5.14.0)	5.14.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R5-5.14.0)

Release 6

ATIS	ATIS.3GPP.25.321V6180-2009	6.18.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.321	6.18.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 321	6.18.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v6i0
TTA	TTAT.3G-25.321(R6-6.18.0)	6.18.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R6-6.18.0)

Release 7

ARIB	ARIB STD-T63-25.321	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25321-7c0.pdf
ATIS	ATIS.3GPP.25.321V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.321	7.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 321	7.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v7c0
TTA	TTAT.3G-25.321(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R7-7.12.0)

Release 8

ARIB	ARIB STD-T63-25.321	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25321-850.pdf
ATIS	ATIS.3GPP.25.321V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.321	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 321	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225321v850
TTA	TTAT.3G-25.321(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.321(R8-8.5.0)

5.3.2.2.11 TS 25.322**Radio link control (RLC) protocol specification**

This specification describes the RLC protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.25.322V3180-2005	3.18.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.322	3.18.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 322	3.18.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v3i0
TTA	TTAT.3G-25.322(R99-3.18.0)	3.18.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R99-3.18.0)
TTC	TS-3GA-25.322(R99)v3.18.0	3.18.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts25322r99v3i0.pdf

Release 4

ATIS	ATIS.3GPP.25.322V4120-2005	4.12.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.322	4.12.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 322	4.12.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v4c0
TTA	TTAT.3G-25.322(R4-4.12.0)	4.12.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R4-4.12.0)
TTC	TS-3GA-25.322(Rel4)v4.12.0	4.12.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts25322rel4v4c0.pdf

Release 5

ATIS	ATIS.3GPP.25.322V5130-2006	5.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.322	5.13.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 322	5.13.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v5d0
TTA	TTAT.3G-25.322(R5-5.13.0)	5.13.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R5-5.13.0)
TTC	TS-3GA-25.322(Rel5)v5.13.0	5.13.0	Published	Feb 06	http://www.ttc.or.jp/imt/ts/ts25322rel5v5d0.pdf

Release 6

ATIS	ATIS.3GPP.25.322V6120-2008	6.12.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.322	6.12.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 322	6.12.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v6c0
TTA	TTAT.3G-25.322(R6-6.12.0)	6.12.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R6-6.12.0)
TTC	TS-3GA-25.322(Rel6)v6.12.0	6.12.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25322rel6v6c0.pdf

Release 7

ATIS	ATIS.3GPP.25.322V790-2009	7.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.322	7.9.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 322	7.9.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v790
TTA	TTAT.3G-25.322(R7-7.9.0)	7.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R7-7.9.0)
TTC	TS-3GA-25.322(Rel7)v7.9.0	7.9.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25322rel7v790.pdf

Release 8

ATIS	ATIS.3GPP.25.322V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.322	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 322	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225322v840
TTA	TTAT.3G-25.322(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.322(R8-8.4.0)
TTC	TS-3GA-25.322(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25322rel8v840.pdf

5.3.2.2.12 TS 25.323**Packet Data Convergence Protocol (PDCP) protocol**

This document provides the description of the Packet Data Convergence Protocol (PDCP). PDCP provides its services to the NAS at the UE or the relay at the Radio Network Controller (RNC). PDCP uses the services provided by the Radio Link Control (RLC) sublayer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.323V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.323	3.10.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 323	3.10.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v3a0
TTA	TTAT.3G-25.323(R99-3.10.0)	3.10.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R99-3.10.0)
TTC	TS-3GA-25.323(R99)v3.10.0	3.10.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25323r99v3a0.pdf

Release 4

ATIS	T1.3GPP.25.323V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.323	4.6.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 323	4.6.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v460
TTA	TTAT.3G-25.323(R4-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R4-4.6.0)
TTC	TS-3GA-25.323(Rel4)v4.6.0	4.6.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25323rel4v460.pdf

Release 5

ATIS	ATIS.3GPP.25.323V5100-2008	5.10.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.323	5.10.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 323	5.10.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v5a0
TTA	TTAT.3G-25.323(R5-5.10.0)	5.10.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R5-5.10.0)
TTC	TS-3GA-25.323(Rel5)v5.10.0	5.10.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25323rel5v5a0.pdf

Release 6

ATIS	ATIS.3GPP.25.323V6110-2008	6.11.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.323	6.11.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 323	6.11.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v6b0
TTA	TTAT.3G-25.323(R6-6.11.0)	6.11.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R6-6.11.0)
TTC	TS-3GA-25.323(Rel6)v6.11.0	6.11.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25323rel6v6b0.pdf

Release 7

ATIS	ATIS.3GPP.25.323V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.323	7.7.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 323	7.7.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v770
TTA	TTAT.3G-25.323(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R7-7.7.0)
TTC	TS-3GA-25.323(Rel7)v7.7.0	7.7.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25323rel7v770.pdf

Release 8

ATIS	ATIS.3GPP.25.323V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.323	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 323	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225323v840
TTA	TTAT.3G-25.323(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.323(R8-8.4.0)
TTC	TS-3GA-25.323(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25323rel8v840.pdf

5.3.2.2.13 TS 25.324**Broadcast/Multicast Control (BMC) Services**

This document provides the description of the Broadcast/Multicast Control Protocol (BMC). This protocol adapts broadcast and multicast services on the radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.25.324V390-2005	3.9.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.324	3.9.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 324	3.9.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v390
TTA	TTAT.3G-25.324(R99-3.9.0)	3.9.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R99-3.9.0)
TTC	TS-3GA-25.324(R99)v3.9.0	3.9.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25324r99v390.pdf

Release 4

ATIS	ATIS.3GPP.25.324V450-2005	4.5.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.324	4.5.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 324	4.5.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v450
TTA	TTAT.3G-25.324(R4-4.5.0)	4.5.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R4-4.5.0)
TTC	TS-3GA-25.324(Rel4)v4.5.0	4.5.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25324rel4v450.pdf

Release 5

ATIS	ATIS.3GPP.25.324V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.324	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 324	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v560
TTA	TTAT.3G-25.324(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R5-5.6.0)
TTC	TS-3GA-25.324(Rel5)v5.6.0	5.6.0	Published	Nov 05	http://www.ttc.or.jp/imt/ts/ts25324rel5v560.pdf

Release 6

ATIS	ATIS.3GPP.25.324V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.324	6.6.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 324	6.6.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v660
TTA	TTAT.3G-25.324(R6-6.6.0)	6.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R6-6.6.0)
TTC	TS-3GA-25.324(Rel6)v6.6.0	6.6.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25324rel6v660.pdf

Release 7

ATIS	ATIS.3GPP.25.324V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.324	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 324	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v710
TTA	TTAT.3G-25.324(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R7-7.1.0)
TTC	TS-3GA-25.324(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25324rel7v710.pdf

Release 8

ATIS	ATIS.3GPP.25.324V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.324	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 324	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225324v800
TTA	TTAT.3G-25.324(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.324(R8-8.0.0)
TTC	TS-3GA-25.324(Rel8)v8.0.0	8.0.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25324rel8v800.pdf

5.3.2.2.14 TS 25.331**Radio resource control (RRC) protocol specification**

This specification describes the RRC protocol for the radio system. The scope of this specification contains also the information to be transported in a transparent container between source RNC and target RNC in connection to SRNC relocation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.25.331V3210-2005	3.21.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.331	3.21.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 331	3.21.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v310
TTA	TTAT.3G-25.331(R99-3.21.0)	3.21.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R99-3.21.0)
TTC	TS-3GA-25.331(R99)v3.21.0	3.21.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25331r99v310.pdf

Release 4

ATIS	ATIS.3GPP.25.331V4200-2009	4.20.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.331	4.20.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 331	4.20.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v4k0
TTA	TTAT.3G-25.331(R4-4.20.0)	4.20.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R4-4.20.0)
TTC	TS-3GA-25.331(Rel4)v4.20.0	4.20.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25331rel4v4k0.pdf

Release 5

ATIS	ATIS.3GPP.25.331V5230-2009	5.23.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.331	5.23.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 331	5.23.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v5n0
TTA	TTAT.3G-25.331(R5-5.23.0)	5.23.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R5-5.23.0)
TTC	TS-3GA-25.331(Rel5)v5.23.0	5.23.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25331rel5v5n0.pdf

Release 6

ATIS	ATIS.3GPP.25.331V6210-2009	6.21.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.331	6.21.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 331	6.21.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v6l0
TTA	TTAT.3G-25.331(R6-6.21.0)	6.21.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R6-6.21.0)
TTC	TS-3GA-25.331(Rel6)v6.21.0	6.21.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25331rel6v6l0.pdf

Release 7

ATIS	ATIS.3GPP.25.331V7121-2009	7.12.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.331	7.12.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 331	7.12.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v7c1
TTA	TTAT.3G-25.331(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R7-7.12.0)
TTC	TS-3GA-25.331(Rel7)v7.12.1	7.12.1	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25331rel7v7c1.pdf

Release 8

ATIS	ATIS.3GPP.25.331V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.331	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 331	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225331v860
TTA	TTAT.3G-25.331(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.331(R8-8.6.0)
TTC	TS-3GA-25.331(Rel8)v8.6.0	8.6.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25331rel8v860.pdf

5.3.2.2.15 TS 25.346**Introduction of the Multimedia Broadcast Multicast Service (MBMS) in the Radio Access Network**

This document is a technical specification of the overall support of Multimedia Broadcast and Multicast Services in UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.346V6130-2008	6.13.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.346	6.13.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 346	6.13.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225346v6d0
TTA	TTAT.3G-25.346(R6-6.13.0)	6.13.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.346(R6-6.13.0)
TTC	TS-3GA-25.346(Rel6)v6.13.0	6.13.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25346rel6v6d0.pdf

Release 7

ATIS	ATIS.3GPP.25.346V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.346	7.7.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 346	7.7.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225346v770
TTA	TTAT.3G-25.346(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.346(R7-7.7.0)
TTC	TS-3GA-25.346(Rel7)v7.7.0	7.7.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25346rel7v770.pdf

Release 8

ATIS	ATIS.3GPP.25.346V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.346	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 346	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0225346v830
TTA	TTAT.3G-25.346(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.346(R8-8.3.0)
TTC	TS-3GA-25.346(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25346rel8v830.pdf

5.3.2.3 25.400 series

SDO (2) Document No. Version Status Issued date Location (1)

5.3.2.3.1 TS 25.401**UTRAN overall description**

This specification describes the overall architecture of the UTRAN, including internal interfaces and assumptions on the radio and Iu interfaces.

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Release 99

ARIB	ARIB STD-T63-25.401	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25401-3a0.pdf
ATIS	T1.3GPP.25.401V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.401	3.10.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 401	3.10.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v3a0
TTA	TTAT.3G-25.401(R99-3.10.0)	3.10.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R99-3.10.0)

Release 4

ARIB	ARIB STD-T63-25.401	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25401-460.pdf
ATIS	T1.3GPP.25.401V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.401	4.6.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 401	4.6.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v460
TTA	TTAT.3G-25.401(R4-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R4-4.6.0)

Release 5

ARIB	ARIB STD-T63-25.401	5.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25401-5a0.pdf
ATIS	ATIS.3GPP.25.401V5100-2006	5.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.401	5.10.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 401	5.10.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v5a0
TTA	TTAT.3G-25.401(R5-5.10.0)	5.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R5-5.10.0)

Release 6

ARIB	ARIB STD-T63-25.401	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25401-690.pdf
ATIS	ATIS.3GPP.25.401V690-2007	6.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.401	6.9.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 401	6.9.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v690
TTA	TTAT.3G-25.401(R6-6.9.0)	6.9.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-25.401	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25401-760.pdf
ATIS	ATIS.3GPP.25.401V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.401	7.6.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 401	7.6.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v760
TTA	TTAT.3G-25.401(R7-7.6.0)	7.6.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R7-7.6.0)

Release 8

ARIB	ARIB STD-T63-25.401	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25401-820.pdf
ATIS	ATIS.3GPP.25.401V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.401	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 401	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325401v820
TTA	TTAT.3G-25.401(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.401(R8-8.2.0)

5.3.2.3.2 TS 25.402**Synchronization in UTRAN Stage 2**

This document constitutes the Stage 2 specification of different synchronization mechanisms in UTRAN and on Uu.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.402	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25402-3a0.pdf
ATIS	T1.3GPP.25.402V3100-2003	3.10.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.402	3.10.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 402	3.10.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v3a0
TTA	TTAT.3G-25.402(R99-3.10.0)	3.10.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-25.402	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25402-460.pdf
ATIS	T1.3GPP.25.402V460-2003	4.6.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.402	4.6.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 402	4.6.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v460
TTA	TTAT.3G-25.402(R4-4.6.0)	4.6.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R4-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.402	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25402-540.pdf
ATIS	ATIS.3GPP.25.402V540-2006	5.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.402	5.4.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 402	5.4.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v540
TTA	TTAT.3G-25.402(R5-5.4.0)	5.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R5-5.4.0)

Release 6

ARIB	ARIB STD-T63-25.402	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25402-660.pdf
ATIS	ATIS.3GPP.25.402V660-2009	6.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.402	6.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 402	6.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v660
TTA	TTAT.3G-25.402(R6-6.6.0)	6.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R6-6.6.0)

Release 7

ARIB	ARIB STD-T63-25.402	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25402-760.pdf
ATIS	ATIS.3GPP.25.402V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.402	7.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 402	7.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v760
TTA	TTAT.3G-25.402(R7-7.6.0)	7.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R7-7.6.0)

Release 8

ARIB	ARIB STD-T63-25.402	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25402-800.pdf
ATIS	ATIS.3GPP.25.402V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.402	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 402	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325402v800
TTA	TTAT.3G-25.402(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.402(R8-8.0.0)

5.3.2.3.3 TS 25.410**UTRAN Iu interface: general aspects and principles**

This specification describes an introduction to the 25.41x series of technical specifications that define the Iu interface for the interconnection of RNC component of the UTRAN to the CN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.410V380-2003	3.8.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.410	3.8.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 410	3.8.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v380
TTA	TTAT.3G-25.410(R99-3.8.0)	3.8.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R99-3.8.0)
TTC	TS-3GA-25.410(R99)v3.8.0	3.8.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25410r99v380.pdf
Release 4					
ATIS	T1.3GPP.25.410V450-2003	4.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.410	4.5.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 410	4.5.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v450
TTA	TTAT.3G-25.410(R4-4.5.0)	4.5.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R4-4.5.0)
TTC	TS-3GA-25.410(Rel4)v4.5.0	4.5.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25410rel4v450.pdf
Release 5					
ATIS	ATIS.3GPP.25.410V540-2005	5.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.410	5.4.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 410	5.4.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v540
TTA	TTAT.3G-25.410(R5-5.4.0)	5.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R5-5.4.0)
TTC	TS-3GA-25.410(Rel5)v5.4.0	5.4.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts25410rel5v540.pdf

Release 6

CCSA	CCSA-TSD-TDD-25.410	6.5.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 410	6.5.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v650
TTA	TTAT.3G-25.410(R6-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R6-6.5.0)
TTC	TS-3GA-25.410(Rel6)v6.5.0	6.5.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25410rel6v650.pdf

Release 7

ATIS	ATIS.3GPP.25.410V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.410	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 410	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v700
TTA	TTAT.3G-25.410(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R7-7.0.0)
TTC	TS-3GA-25.410(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25410rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.25.410V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.410	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 410	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325410v810
TTA	TTAT.3G-25.410(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.410(R8-8.1.0)
TTC	TS-3GA-25.410(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25410rel8v810.pdf

5.3.2.3.4 TS 25.411**UTRAN Iu interface Layer 1**

This specification describes the standards allowed to implement Layer 1 on the Iu interface. The specification of transmission delay requirements and O&M requirements are not in the scope of this specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.411V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.411	3.5.0	Published	Aug 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 411	3.5.0	Published	Aug 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411UR4
TTA	TTAE.3G-25.411(R99-3.5.0)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.411(R99-3.5.0)
TTC	TS-3GA-25.411(R99)v3.5.0	3.5.0	Published	Aug 01	http://www.ttc.or.jp/imt/ts/ts25411r99v350.pdf
Release 4					
ATIS	T1.3GPP.25.411V410-2002	4.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.411	4.1.0	Published	Aug 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 411	4.1.0	Published	Aug 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411Uv4R1
TTA	TTAE.3G-25.411(R4-4.1.0)	4.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.411(R4-4.1.0)
TTC	TS-3GA-25.411(Rel4)v4.1.0	4.1.0	Published	Aug 01	http://www.ttc.or.jp/imt/ts/ts25411rel4v410.pdf
Release 5					
ATIS	ATIS.3GPP.25.411V510-2005	5.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.411	5.1.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 411	5.1.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v510
TTA	TTAT.3G-25.411(R5-5.1.0)	5.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R5-5.1.0)
TTC	TS-3GA-25.411(Rel5)v5.1.0	5.1.0	Published	Nov 04	http://www.ttc.or.jp/imt/ts/ts25411rel5v510.pdf

Release 6

ATIS	ATIS.3GPP.25.411V610-2005	6.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.411	6.1.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 411	6.1.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v610
TTA	TTAT.3G-25.411(R6-6.1.0)	6.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R6-6.1.0)
TTC	TS-3GA-25.411(Rel6)v6.1.0	6.1.0	Published	Nov 04	http://www.ttc.or.jp/imt/ts/ts25411rel6v610.pdf

Release 7

ATIS	ATIS.3GPP.25.411V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.411	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 411	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v710
TTA	TTAT.3G-25.411(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R7-7.1.0)
TTC	TS-3GA-25.411(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25411rel7v710.pdf

Release 8

ATIS	ATIS.3GPP.25.411V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.411	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 411	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325411v800
TTA	TTAT.3G-25.411(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.411(R8-8.0.0)
TTC	TS-3GA-25.411(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25411rel8v800.pdf

5.3.2.3.5 TS 25.412**UTRAN Iu interface signalling transport**

This specification describes the standards for Signalling Transport to be used across Iu Interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.412V360-2002	3.6.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.412	3.6.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 412	3.6.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412UR4
TTA	TTAE.3G-25.412(R99-3.6.0)	3.6.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.412(R99-3.6.0)
TTC	TS-3GA-25.412(R99)v3.6.0	3.6.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts25412r99v360.pdf
Release 4					
ATIS	T1.3GPP.25.412V410-2003	4.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.412	4.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 412	4.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v410
TTA	TTAT.3G-25.412(R4-4.1.0)	4.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R4-4.1.0)
TTC	TS-3GA-25.412(Rel4)v4.1.0	4.1.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25412rel4v410.pdf
Release 5					
ATIS	ATIS.3GPP.25.412V520-2005	5.2.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.412	5.2.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 412	5.2.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v520
TTA	TTAT.3G-25.412(R5-5.2.0)	5.2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R5-5.2.0)
TTC	TS-3GA-25.412(Rel5)v5.2.0	5.2.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25412rel5v520.pdf

Release 6

ATIS	ATIS.3GPP.25.412V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.412	6.4.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 412	6.4.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v640
TTA	TTAT.3G-25.412(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R6-6.4.0)
TTC	TS-3GA-25.412(Rel6)v6.4.0	6.4.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25412rel6v640.pdf

Release 7

ATIS	ATIS.3GPP.25.412V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.412	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 412	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v710
TTA	TTAT.3G-25.412(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R7-7.1.0)
TTC	TS-3GA-25.412(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25412rel7v710.pdf

Release 8

ATIS	ATIS.3GPP.25.412V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.412	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 412	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325412v800
TTA	TTAT.3G-25.412(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.412(R8-8.0.0)
TTC	TS-3GA-25.412(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25412rel8v800.pdf

5.3.2.3.6 TS 25.413**UTRAN Iu interface RANAP signalling**

This specification describes the signalling between the CN and the UTRAN over the Iu interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.413V3140-2004	3.14.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.413	3.14.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 413	3.14.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v3e0
TTA	TTAT.3G-25.413(R99-3.14.0)	3.14.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R99-3.14.0)
TTC	TS-3GA-25.413(R99)v3.14.0	3.14.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts25413r99v3e0.pdf
Release 4					
CCSA	CCSA-TSD-TDD-25.413	4.12.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 413	4.12.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v4c0
TTA	TTAT.3G-25.413(R4-4.12.0)	4.12.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R4-4.12.0)
TTC	TS-3GA-25.413(Rel4)v4.12.0	4.12.0	Published	May 04	http://www.ttc.or.jp/imt/ts/ts25413rel4v4c0.pdf
Release 5					
ATIS	ATIS.3GPP.25.413V5120-2006	5.12.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.413	5.12.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 413	5.12.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v5c0
TTA	TTAT.3G-25.413(R5-5.12.0)	5.12.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R5-5.12.0)
TTC	TS-3GA-25.413(Rel5)v5.12.0	5.12.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts25413rel5v5c0.pdf

Release 6

ATIS	ATIS.3GPP.25.413V6160-2008	6.16.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.413	6.16.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 413	6.16.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v6g0
TTA	TTAT.3G-25.413(R6-6.16.0)	6.16.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R6-6.16.0)
TTC	TS-3GA-25.413(Rel6)v6.16.0	6.16.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts25413rel6v6g0.pdf

Release 7

ATIS	ATIS.3GPP.25.413V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.413	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 413	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v7a0
TTA	TTAT.3G-25.413(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R7-7.10.0)
TTC	TS-3GA-25.413(Rel7)v7.10.0	7.10.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25413rel7v7a0.pdf

Release 8

ATIS	ATIS.3GPP.25.413V821-2009	8.2.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.413	8.2.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 413	8.2.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325413v821
TTA	TTAT.3G-25.413(R8-8.2.1)	8.2.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.413(R8-8.2.1)
TTC	TS-3GA-25.413(Rel8)v8.2.1	8.2.1	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts25413rel8v821.pdf

5.3.2.3.7 TS 25.414**UTRAN Iu interface data transport and transport signalling**

This specification describes the standards for user data transport protocols and related signalling protocols to establish user plane transport bearers over the Iu interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.414V3130-2004	3.13.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.414	3.13.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 414	3.13.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v3d0
TTA	TTAT.3G-25.414(R99-3.13.0)	3.13.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R99-3.13.0)
TTC	TS-3GA-25.414(R99)v3.13.0	3.13.0	Published	May 03	http://www.ttc.or.jp/imt/ts/ts25414r99v3d0.pdf
Release 4					
ATIS	T1.3GPP.25.414V470-2004	4.7.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.414	4.7.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 414	4.7.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v470
TTA	TTAT.3G-25.414(R4-4.7.0)	4.7.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R4-4.7.0)
TTC	TS-3GA-25.414(Rel4)v4.7.0	4.7.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts25414rel4v470.pdf
Release 5					
ATIS	ATIS.3GPP.25.414V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.414	5.7.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 414	5.7.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v570
TTA	TTAT.3G-25.414(R5-5.7.0)	5.7.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R5-5.7.0)
TTC	TS-3GA-25.414(Rel5)v5.7.0	5.7.0	Published	Nov 04	http://www.ttc.or.jp/imt/ts/ts25414rel5v570.pdf

Release 6

ATIS	ATIS.3GPP.25.414V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.414	6.4.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 414	6.4.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v640
TTA	TTAT.3G-25.414(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R6-6.4.0)
TTC	TS-3GA-25.414(Rel6)v6.4.0	6.4.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25414rel6v640.pdf

Release 7

ATIS	ATIS.3GPP.25.414V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.414	7.1.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 414	7.1.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v710
TTA	TTAT.3G-25.414(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R7-7.1.0)
TTC	TS-3GA-25.414(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25414rel7v710.pdf

Release 8

ATIS	ATIS.3GPP.25.414V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.414	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 414	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325414v800
TTA	TTAT.3G-25.414(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.414(R8-8.0.0)
TTC	TS-3GA-25.414(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25414rel8v800.pdf

5.3.2.3.8 TS 25.415**UTRAN Iu interface user plane protocols**

This specification describes the protocols being used to transport and control over the Iu interface, the Iu user data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.415V3120-2003	3.12.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.415	3.12.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 415	3.12.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v3c0
TTA	TTAT.3G-25.415(R99-3.12.0)	3.12.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R99-3.12.0)
TTC	TS-3GA-25.415(R99)v3.12.0	3.12.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts25415r99v3c0.pdf
Release 4					
ATIS	T1.3GPP.25.415V470-2003	4.7.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.415	4.7.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 415	4.7.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v470
TTA	TTAT.3G-25.415(R4-4.7.0)	4.7.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R4-4.7.0)
TTC	TS-3GA-25.415(Rel4)v4.7.0	4.7.0	Published	Feb 03	http://www.ttc.or.jp/imt/ts/ts25415rel4v470.pdf
Release 5					
ATIS	ATIS.3GPP.25.415V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.415	5.5.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 415	5.5.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v550
TTA	TTAT.3G-25.415(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R5-5.5.0)
TTC	TS-3GA-25.415(Rel5)v5.5.0	5.5.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts25415rel5v550.pdf

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ATIS	ATIS.3GPP.25.415V630-2007	6.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.415	6.3.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 415	6.3.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v630
TTA	TTAT.3G-25.415(R6-6.3.0)	6.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R6-6.3.0)
TTC	TS-3GA-25.415(Rel6)v6.3.0	6.3.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts25415rel6v630.pdf

Release 7

ATIS	ATIS.3GPP.25.415V730-2007	7.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.415	7.3.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 415	7.3.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v730
TTA	TTAT.3G-25.415(R7-7.3.0)	7.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R7-7.3.0)
TTC	TS-3GA-25.415(Rel7)v7.3.0	7.3.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25415rel7v730.pdf

Release 8

ATIS	ATIS.3GPP.25.415V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.415	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 415	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325415v800
TTA	TTAT.3G-25.415(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.415(R8-8.0.0)
TTC	TS-3GA-25.415(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25415rel8v800.pdf

5.3.2.3.9 TS 25.419**UTRAN Iu-bc interface: Cell broadcast protocols between CBC and RNC**

This document specifies the Service Area Broadcast Protocol (SABP) between the Cell Broadcast Centre (CBC) and the Radio Network Controller (RNC).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.419V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.419	3.11.0	Published	Jun 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 419	3.11.0	Published	Jun 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v3b0
TTA	TTAT.3G-25.419(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R99-3.11.0)
TTC	TS-3GA-25.419(R99)v3.11.0	3.11.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts25419r99v3b0.pdf
Release 4					
ATIS	T1.3GPP.25.419V4100-2004	4.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.419	4.10.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 419	4.10.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v4a0
TTA	TTAT.3G-25.419(R4-4.10.0)	4.10.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R4-4.10.0)
TTC	TS-3GA-25.419(Rel4)v4.10.0	4.10.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts25419rel4v4a0.pdf
Release 5					
ATIS	ATIS.3GPP.25.419V570-2005	5.7.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.419	5.7.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 419	5.7.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v570
TTA	TTAT.3G-25.419(R5-5.7.0)	5.7.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R5-5.7.0)
TTC	TS-3GA-25.419(Rel5)v5.7.0	5.7.0	Published	May 04	http://www.ttc.or.jp/imt/ts/ts25419rel5v570.pdf

Release 6

ATIS	ATIS.3GPP.25.419V620-2005	6.2.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.419	6.2.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 419	6.2.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v620
TTA	TTAT.3G-25.419(R6-6.2.0)	6.2.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R6-6.2.0)
TTC	TS-3GA-25.419(Rel6)v6.2.0	6.2.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts25419rel6v620.pdf

Release 7

ATIS	ATIS.3GPP.25.419V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.419	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 419	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v700
TTA	TTAT.3G-25.419(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R7-7.0.0)
TTC	TS-3GA-25.419(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts25419rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.25.419V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.419	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 419	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325419v800
TTA	TTAT.3G-25.419(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.419(R8-8.0.0)
TTC	TS-3GA-25.419(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts25419rel8v800.pdf

5.3.2.3.10 TS 25.420**UTRAN Iur interface: general aspects and principles**

This specification describes an introduction to the TSG RAN TS 25.42x series of technical specifications that define the Iur interface. It is a logical interface for the interconnection of two RNC components of the UTRAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.420	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25420-350.pdf
ATIS	T1.3GPP.25.420V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.420	3.5.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 420	3.5.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420UR5
TTA	TTAE.3G-25.420(R99-3.5.0)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.420(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-25.420	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25420-420.pdf
ATIS	T1.3GPP.25.420V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.420	4.2.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 420	4.2.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420Uv4R2
TTA	TTAE.3G-25.420(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.420(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-25.420	5.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25420-530.pdf
ATIS	ATIS.3GPP.25.420V530-2006	5.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.420	5.3.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 420	5.3.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v530
TTA	TTAT.3G-25.420(R5-5.3.0)	5.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R5-5.3.0)

Release 6

ARIB	ARIB STD-T63-25.420	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25420-640.pdf
ATIS	ATIS.3GPP.25.420V640-2006	6.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.420	6.4.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 420	6.4.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v640
TTA	TTAT.3G-25.420(R6-6.4.0)	6.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R6-6.4.0)

Release 7

ARIB	ARIB STD-T63-25.420	7.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25420-730.pdf
ATIS	ATIS.3GPP.25.420V730-2007	7.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.420	7.3.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 420	7.3.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v730
TTA	TTAT.3G-25.420(R7-7.3.0)	7.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R7-7.3.0)

Release 8

ARIB	ARIB STD-T63-25.420	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25420-810.pdf
ATIS	ATIS.3GPP.25.420V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.420	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 420	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325420v810
TTA	TTAT.3G-25.420(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.420(R8-8.1.0)

5.3.2.3.11 TS 25.421**UTRAN Iur interface Layer 1**

This specification describes the standards allowed to implement Layer 1 on the Iur interface. The specification of transmission delay requirements and O&M requirements are not in the scope of this specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.421	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25421-310.pdf
ATIS	T1.3GPP.25.421V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.421	3.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 421	3.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421URI
TTA	TTAE.3G-25.421(R99-3.1.0)	3.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.421(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-25.421	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25421-400.pdf
ATIS	T1.3GPP.25.421V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.421	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 421	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421Uv4
TTA	TTAE.3G-25.421(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.421(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.421	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25421-500.pdf
ATIS	T1.3GPP.25.421V500-2002	5.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.421	5.0.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 421	5.0.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421Uv5
TTA	TTAE.3G-25.421(R5-5.0.0)	5.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.421(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-25.421	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25421-600.pdf
ATIS	T1.3GPP.25.421V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.421	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 421	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421v600
TTA	TTAT.3G-25.421(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.421(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-25.421	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25421-700.pdf
ATIS	ATIS.3GPP.25.421V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.421	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 421	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421v700
TTA	TTAT.3G-25.421(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.421(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-25.421	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25421-800.pdf
ATIS	ATIS.3GPP.25.421V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.421	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 421	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325421v800
TTA	TTAT.3G-25.421(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.421(R8-8.0.0)

5.3.2.3.12 TS 25.422**UTRAN Iur interface signalling transport**

This specification describes the standards for Signalling Transport to be used across Iur Interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.422	3.6.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25422-361.pdf
ATIS	T1.3GPP.25.422V361-2002	3.6.1	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.422	3.6.1	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 422	3.6.1	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422UR6
TTA	TTAT.3G-25.422(R99-3.6.1)	3.6.1	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R99-3.6.1)
Release 4					
ARIB	ARIB STD-T63-25.422	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25422-420.pdf
ATIS	T1.3GPP.25.422V420-2003	4.2.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.422	4.2.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 422	4.2.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v420
TTA	TTAT.3G-25.422(R4-4.2.0)	4.2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-25.422	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25422-510.pdf
ATIS	T1.3GPP.25.422V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.422	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 422	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v510
TTA	TTAT.3G-25.422(R5-5.1.0))	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R5-5.1.0))

Release 6

ARIB	ARIB STD-T63-25.422	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25422-620.pdf
ATIS	ATIS.3GPP.25.422V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.422	6.2.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 422	6.2.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v620
TTA	TTAT.3G-25.422(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-25.422	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25422-710.pdf
ATIS	ATIS.3GPP.25.422V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.422	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 422	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v710
TTA	TTAT.3G-25.422(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R7-7.1.0)

Release 8

ARIB	ARIB STD-T63-25.422	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25422-800.pdf
ATIS	ATIS.3GPP.25.422V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.422	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 422	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325422v800
TTA	TTAT.3G-25.422(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.422(R8-8.0.0)

5.3.2.3.13 TS 25.423**UTRAN Iur interface RNSAP signalling**

This specification describes the radio network layer signalling procedures between RNCs in UTRAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.423	3.14.2	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25423-3e2.pdf
ATIS	ATIS.3GPP.25.423V3142-2005	3.14.2	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.423	3.14.2	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 423	3.14.2	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v3e2
TTA	TTAT.3G-25.423(R99-3.14.2)	3.14.2	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R99-3.14.2)
Release 4					
ARIB	ARIB STD-T63-25.423	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25423-4d0.pdf
ATIS	ATIS.3GPP.25.423V4130-2006	4.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.423	4.13.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 423	4.13.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v4d0
TTA	TTAT.3G-25.423(R4-4.13.0)	4.13.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R4-4.13.0)
Release 5					
ARIB	ARIB STD-T63-25.423	5.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25423-5h0.pdf
ATIS	ATIS.3GPP.25.423V5170-2007	5.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.423	5.17.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 423	5.17.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v5h0
TTA	TTAT.3G-25.423(R5-5.17.0)	5.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R5-5.17.0)

Release 6

ARIB	ARIB STD-T63-25.423	6.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25423-6h0.pdf
ATIS	ATIS.3GPP.25.423V6170-2008	6.17.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.423	6.17.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 423	6.17.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v6h0
TTA	TTAT.3G-25.423(R6-6.17.0)	6.17.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R6-6.17.0)

Release 7

ARIB	ARIB STD-T63-25.423	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25423-7c0.pdf
ATIS	ATIS.3GPP.25.423V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.423	7.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 423	7.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v7c0
TTA	TTAT.3G-25.423(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R7-7.12.0)

Release 8

ARIB	ARIB STD-T63-25.423	8.4.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25423-841.pdf
ATIS	ATIS.3GPP.25.423V841-2009	8.4.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.423	8.4.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 423	8.4.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325423v841
TTA	TTAT.3G-25.423(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.423(R8-8.4.0)

5.3.2.3.14 TS 25.424**UTRAN Iur interface data transport and transport signalling for common transport channel data streams**

This specification describes the UTRAN RNS-RNS (Iur) interface data transport and transport signalling for common transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.424	3.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25424-390.pdf
ATIS	T1.3GPP.25.424V390-2003	3.9.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.424	3.9.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 424	3.9.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v390
TTA	TTAT.3G-25.424(R99-3.9.0)	3.9.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R99-3.9.0)
Release 4					
ARIB	ARIB STD-T63-25.424	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25424-430.pdf
ATIS	T1.3GPP.25.424V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.424	4.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 424	4.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v430
TTA	TTAT.3G-25.424(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-25.424	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25424-560.pdf
ATIS	ATIS.3GPP.25.424V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.424	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 424	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v560
TTA	TTAT.3G-25.424(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-25.424	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25424-630.pdf
ATIS	ATIS.3GPP.25.424V630-2006	6.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.424	6.3.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 424	6.3.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v630
TTA	TTAT.3G-25.424(R6-6.3.0)	6.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R6-6.3.0)

Release 7

ARIB	ARIB STD-T63-25.424	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25424-710.pdf
ATIS	ATIS.3GPP.25.424V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.424	7.1.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 424	7.1.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v710
TTA	TTAT.3G-25.424(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R7-7.1.0)

Release 8

ARIB	ARIB STD-T63-25.424	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25424-800.pdf
ATIS	ATIS.3GPP.25.424V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.424	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 424	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325424v800
TTA	TTAT.3G-25.424(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.424(R8-8.0.0)

5.3.2.3.15 TS 25.425**UTRAN Iur interface user plane protocols for common transport channel data streams**

This specification describes the UTRAN RNS-RNS (Iur) interface user plane protocols for common transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.425	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25425-380.pdf
ATIS	T1.3GPP.25.425V380-2004	3.8.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.425	3.8.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 425	3.8.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v380
TTA	TTAT.3G-25.425(R99-3.8.0)	3.8.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R99-3.8.0)
Release 4					
ARIB	ARIB STD-T63-25.425	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25425-440.pdf
ATIS	T1.3GPP.25.425V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.425	4.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 425	4.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v440
TTA	TTAT.3G-25.425(R4-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.425	5.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25425-580.pdf
ATIS	ATIS.3GPP.25.425V580-2006	5.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.425	5.8.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 425	5.8.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v580
TTA	TTAT.3G-25.425(R5-5.8.0)	5.8.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R5-5.8.0)

Release 6

ARIB	ARIB STD-T63-25.425	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25425-660.pdf
ATIS	ATIS.3GPP.25.425V660-2009	6.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.425	6.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 425	6.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v660
TTA	TTAT.3G-25.425(R6-6.6.0)	6.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R6-6.6.0)

Release 7

ARIB	ARIB STD-T63-25.425	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25425-7a0.pdf
ATIS	ATIS.3GPP.25.425V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.425	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 425	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v7a0
TTA	TTAT.3G-25.425(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R7-7.10.0)

Release 8

ARIB	ARIB STD-T63-25.425	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25425-820.pdf
ATIS	ATIS.3GPP.25.425V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.425	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 425	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325425v820
TTA	TTAT.3G-25.425(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.425(R8-8.2.0)

5.3.2.3.16 TS 25.426**UTRAN Iur and Iub interface data transport and transport signalling for DCH data streams**

This specification describes the transport bearers for the DCH data streams on UTRAN Iur and Iub interfaces. The corresponding transport network control plane is also specified. The physical layer for the transport bearers is outside the scope of this TS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.25.426V390-2003	3.9.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.426	3.9.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 426	3.9.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v390
TTA	TTAT.3G-25.426(R99-3.9.0)	3.9.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R99-3.9.0)
Release 4					
ARIB	ARIB STD-T63-25.426	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25426-440.pdf
ATIS	T1.3GPP.25.426V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.426	4.4.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 426	4.4.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v440
TTA	TTAT.3G-25.426(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.426	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25426-560.pdf
ATIS	ATIS.3GPP.25.426V560-2005	5.6.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.426	5.6.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 426	5.6.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v560
TTA	TTAT.3G-25.426(R5-5.6.0)	5.6.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-25.426	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25426-650.pdf
ATIS	ATIS.3GPP.25.426V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.426	6.5.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 426	6.5.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v650
TTA	TTAT.3G-25.426(R6-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R6-6.5.0)

Release 7

ARIB	ARIB STD-T63-25.426	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25426-710.pdf
ATIS	ATIS.3GPP.25.426V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.426	7.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 426	7.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v710
TTA	TTAT.3G-25.426(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R7-7.1.0)

Release 8

ARIB	ARIB STD-T63-25.426	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25426-800.pdf
ATIS	ATIS.3GPP.25.426V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.426	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 426	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325426v800
TTA	TTAT.3G-25.426(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.426(R8-8.0.0)

5.3.2.3.17 TS 25.427**UTRAN Iur and Iub interface user plane protocols for DCH data streams**

This specification describes the UTRAN Iur and Iub interfaces user plane protocols for dedicated transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.427	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25427-3b0.pdf
ATIS	T1.3GPP.25.427V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.427	3.11.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 427	3.11.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v3b0
TTA	TTAT.3G-25.427(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.427	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25427-450.pdf
ATIS	T1.3GPP.25.427V450-2004	4.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.427	4.5.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 427	4.5.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v450
TTA	TTAT.3G-25.427(R4-4.5.0)	4.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R4-4.5.0)
Release 5					
ARIB	ARIB STD-T63-25.427	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25427-550.pdf
ATIS	ATIS.3GPP.25.427V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.427	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 427	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v550
TTA	TTAT.3G-25.427(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R5-5.5.0)

Release 6

ARIB	ARIB STD-T63-25.427	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25427-680.pdf
ATIS	ATIS.3GPP.25.427V680-2007	6.8.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.427	6.8.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 427	6.8.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v680
TTA	TTAT.3G-25.427(R6-6.8.0)	6.8.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R6-6.8.0)

Release 7

ARIB	ARIB STD-T63-25.427	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25427-750.pdf
ATIS	ATIS.3GPP.25.427V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.427	7.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 427	7.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v750
TTA	TTAT.3G-25.427(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-25.427	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25427-810.pdf
ATIS	ATIS.3GPP.25.427V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.427	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 427	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325427v810
TTA	TTAT.3G-25.427(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.427(R8-8.1.0)

5.3.2.3.18 TS 25.430**UTRAN Iub interface: general aspects and principles**

This specification describes the TSG RAN TS 25.43x series of UMTS technical specifications that define the Iub interface. The Iub interface is a logical interface for the interconnection of Node B and RNC components of the UTRAN.

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Release 99					
ARIB	ARIB STD-T63-25.430	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25430-380.pdf
ATIS	T1.3GPP.25.430V380-2003	3.8.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.430	3.8.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 430	3.8.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v380
TTA	TTAT.3G-25.430(R99-3.8.0)	3.8.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R99-3.8.0)
Release 4					
ARIB	ARIB STD-T63-25.430	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25430-440.pdf
ATIS	T1.3GPP.25.430V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.430	4.4.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 430	4.4.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v440
TTA	TTAT.3G-25.430(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.430	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25430-550.pdf
ATIS	ATIS.3GPP.25.430V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.430	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 430	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v550
TTA	TTAT.3G-25.430(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R5-5.5.0)

Release 6

ARIB	ARIB STD-T63-25.430	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25430-650.pdf
ATIS	ATIS.3GPP.25.430V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.430	6.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 430	6.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v650
TTA	TTAT.3G-25.430(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R6-6.5.0)

Release 7

ARIB	ARIB STD-T63-25.430	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25430-750.pdf
ATIS	ATIS.3GPP.25.430V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.430	7.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 430	7.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v750
TTA	TTAT.3G-25.430(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R7-7.5.0)

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ARIB	ARIB STD-T63-25.430	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25430-800.pdf
ATIS	ATIS.3GPP.25.430V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.430	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 430	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325430v800
TTA	TTAT.3G-25.430(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.430(R8-8.0.0)

5.3.2.3.19 TS 25.431**UTRAN Iub interface: Layer 1**

This specification describes the standards allowed to implement Layer 1 on the Iub interface. The specification of transmission delay requirements and O&M requirements is not in the scope of this specification.

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Release 99					
ARIB	ARIB STD-T63-25.431	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25431-310.pdf
ATIS	T1.3GPP.25.431V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.431	3.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 431	3.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431UR1
TTA	TTAE.3G-25.431(R99-3.1.0)	3.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.431(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-25.431	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25431-400.pdf
ATIS	T1.3GPP.25.431V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.431	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 431	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431Uv4
TTA	TTAE.3G-25.431(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.431(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.431	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25431-500.pdf
ATIS	T1.3GPP.25.431V500-2002	5.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.431	5.0.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 431	5.0.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431Uv5
TTA	TTAE.3G-25.431(R5-5.0.0)	5.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.431(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-25.431	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25431-600.pdf
ATIS	T1.3GPP.25.431V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.431	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 431	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431v600
TTA	TTAT.3G-25.431(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.431(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-25.431	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25431-700.pdf
ATIS	ATIS.3GPP.25.431V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.431	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 431	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431v700
TTA	TTAT.3G-25.431(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.431(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-25.431	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25431-800.pdf
ATIS	ATIS.3GPP.25.431V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.431	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 431	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325431v800
TTA	TTAT.3G-25.431(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.431(R8-8.0.0)

5.3.2.3.20 TS 25.432**UTRAN Iub interface: signalling transport**

This specification describes the signalling transport related to the Node B application part (NBAP) signalling to be used across the Iub interface. The Iub interface is a logical interface for the interconnection of Node B and RNC components of the UTRAN. The RNC signalling between these nodes is based on NBAP.

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Release 99					
ARIB	ARIB STD-T63-25.432	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25432-310.pdf
ATIS	T1.3GPP.25.432V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.432	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 432	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325432U
TTA	TTAE.3G-25.432(F)	3.1.0	Approved	Mar 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.432(F)
Release 4					
ARIB	ARIB STD-T63-25.432	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25432-400.pdf
ATIS	T1.3GPP.25.432V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.432	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 432	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432Uv4
TTA	TTAE.3G-25.432(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.432(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.432	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25432-510.pdf
ATIS	T1.3GPP.25.432V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.432	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 432	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v510
TTA	TTAT.3G-25.432(R5-5.1.0)	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R5-5.1.0)

Release 6

ARIB	ARIB STD-T63-25.432	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25432-600.pdf
ATIS	T1.3GPP.25.432V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.432	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 432	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v600
TTA	TTAT.3G-25.432(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-25.432	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25432-710.pdf
ATIS	ATIS.3GPP.25.432V710-2004	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.432	7.1.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 432	7.1.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v710
TTA	TTAT.3G-25.432(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R7-7.1.0)

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ARIB	ARIB STD-T63-25.432	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25432-800.pdf
ATIS	ATIS.3GPP.25.432V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.432	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 432	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325432v800
TTA	TTAT.3G-25.432(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.432(R8-8.0.0)

5.3.2.3.21 TS 25.433**UTRAN Iub interface: NBAP signalling**

This specification describes the standards for NBAP specification to be used over Iub interface.

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Release 99					
ARIB	ARIB STD-T63-25.433	3.14.2	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25433-3e2.pdf
ATIS	ATIS.3GPP.25.433V3142-2005	3.14.2	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.433	3.14.2	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 433	3.14.2	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v3e2
TTA	TTAT.3G-25.433(R99-3.14.2)	3.14.2	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R99-3.14.2)
Release 4					
ARIB	ARIB STD-T63-25.433	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25433-4d0.pdf
ATIS	ATIS.3GPP.25.433V4130-2005	4.13.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.433	4.13.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 433	4.13.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v4d0
TTA	TTAT.3G-25.433(R4-4.13.0)	4.13.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R4-4.13.0)
Release 5					
ARIB	ARIB STD-T63-25.433	5.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25433-5g0.pdf
ATIS	ATIS.3GPP.25.433V5160-2007	5.16.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.433	5.16.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 433	5.16.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v5g0
TTA	TTAT.3G-25.433(R5-5.16.0)	5.16.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R5-5.16.0)

Release 6

ARIB	ARIB STD-T63-25.433	6.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25433-6h0.pdf
ATIS	ATIS.3GPP.25.433V6170-2008	6.17.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.433	6.17.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 433	6.17.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v6h0
TTA	TTAT.3G-25.433(R6-6.17.0)	6.17.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R6-6.17.0)

Release 7

ARIB	ARIB STD-T63-25.433	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25433-7c0.pdf
ATIS	ATIS.3GPP.25.433V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.433	7.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 433	7.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v7c0
TTA	TTAT.3G-25.433(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R7-7.12.0)

Release 8

ARIB	ARIB STD-T63-25.433	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25433-840.pdf
ATIS	ATIS.3GPP.25.433V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.433	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 433	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325433v840
TTA	TTAT.3G-25.433(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.433(R8-8.4.0)

5.3.2.3.22 TS 25.434**UTRAN Iub interface data transport and transport signalling for common transport channel data streams**

This specification describes the UTRAN RNC-Node B (Iub) interface data transport and transport signalling for CCH data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.434	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25434-380.pdf
ATIS	T1.3GPP.25.434V380-2003	3.8.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.434	3.8.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 434	3.8.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v380
TTA	TTAT.3G-25.434(R99-3.8.0)	3.8.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R99-3.8.0)
Release 4					
ARIB	ARIB STD-T63-25.434	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25434-440.pdf
ATIS	T1.3GPP.25.434V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.434	4.4.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 434	4.4.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v440
TTA	TTAT.3G-25.434(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.434	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25434-550.pdf
ATIS	ATIS.3GPP.25.434V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.434	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 434	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v550
TTA	TTAT.3G-25.434(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R5-5.5.0)

Release 6

ARIB	ARIB STD-T63-25.434	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25434-620.pdf
ATIS	ATIS.3GPP.25.434V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.434	6.2.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 434	6.2.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v620
TTA	TTAT.3G-25.434(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-25.434	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25434-720.pdf
ATIS	ATIS.3GPP.25.434V720-2008	7.2.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.434	7.2.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 434	7.2.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v720
TTA	TTAT.3G-25.434(R7-7.2.0)	7.2.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R7-7.2.0)

Release 8

ARIB	ARIB STD-T63-25.434	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25434-800.pdf
ATIS	ATIS.3GPP.25.434V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.434	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 434	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325434v800
TTA	TTAT.3G-25.434(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.434(R8-8.0.0)

5.3.2.3.23 TS 25.435**UTRAN Iub interface user plane protocols for common transport channel data streams**

This specification describes the UTRAN RNC-Node B (Iub) interface user plane protocols for common transport channel data streams.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.435	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25435-3b0.pdf
ATIS	T1.3GPP.25.435V3110-2004	3.11.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.435	3.11.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 435	3.11.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v3b0
TTA	TTAT.3G-25.435(R99-3.11.0)	3.11.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-25.435	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25435-460.pdf
ATIS	T1.3GPP.25.435V460-2004	4.6.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.435	4.6.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 435	4.6.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v460
TTA	TTAT.3G-25.435(R4-4.6.0)	4.6.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R4-4.6.0)
Release 5					
ARIB	ARIB STD-T63-25.435	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25435-590.pdf
ATIS	ATIS.3GPP.25.435V590-2007	5.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.435	5.9.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 435	5.9.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v590
TTA	TTAT.3G-25.435(R5-5.9.0)	5.9.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-25.435	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25435-650.pdf
ATIS	ATIS.3GPP.25.435V650-2009	6.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.435	6.5.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 435	6.5.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v650
TTA	TTAT.3G-25.435(R6-6.5.0)	6.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R6-6.5.0)

Release 7

ARIB	ARIB STD-T63-25.435	7.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25435-7b0.pdf
ATIS	ATIS.3GPP.25.435V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.435	7.11.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 435	7.11.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v7b0
TTA	TTAT.3G-25.435(R7-7.11.0)	7.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R7-7.11.0)

Release 8

ARIB	ARIB STD-T63-25.435	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25435-820.pdf
ATIS	ATIS.3GPP.25.435V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.435	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 435	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325435v820
TTA	TTAT.3G-25.435(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.435(R8-8.2.0)

5.3.2.3.24 TS 25.442**UTRAN implementation specific O&M transport**

This specification describes the transport of implementation specific O&M signalling between Node B and the management platform in case that the transport is routed via the RNC.

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Release 99					
ARIB	ARIB STD-T63-25.442	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25442-310.pdf
ATIS	T1.3GPP.25.442V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.442	3.1.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 442	3.1.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442URI
TTA	TTAE.3G-25.442(R99-3.1.0)	3.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.442(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-25.442	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25442-400.pdf
ATIS	T1.3GPP.25.442V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.442	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 442	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442Uv4
TTA	TTAE.3G-25.442(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.442(R4-4.0.0)
Release 5					
ARIB	ARIB STD-T63-25.442	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25442-510.pdf
ATIS	T1.3GPP.25.442V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.442	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 442	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v510
TTA	TTAT.3G-25.442(R5-5.1.0)	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R5-5.1.0)

Release 6

ARIB	ARIB STD-T63-25.442	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25442-600.pdf
ATIS	T1.3GPP.25.442V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.442	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 442	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v600
TTA	TTAT.3G-25.442(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-25.442	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25442-700.pdf
ATIS	ATIS.3GPP.25.442V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.442	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 442	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v700
TTA	TTAT.3G-25.442(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-25.442	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25442-800.pdf
ATIS	ATIS.3GPP.25.442V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.442	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 442	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325442v800
TTA	TTAT.3G-25.442(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.442(R8-8.0.0)

5.3.2.3.25 TS 25.450**UTRAN Iupc interface general aspects and principles**

The present document is an introduction to the TSG RAN TS 25.45z series of UMTS Technical Specifications that define the Iupc Interface. The Iupc interface is a logical interface for the interconnection of Standalone SMLC (SAS) and Radio Network Controller (RNC) components of the Universal Terrestrial Radio Access Network (UTRAN) for the UMTS system.

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Release 5					
ARIB	ARIB STD-T63-25.450	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25450-520.pdf
ATIS	ATIS.3GPP.25.450V520-2006	5.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.450	5.2.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 450	5.2.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v520
TTA	TTAE.3G-25.450(R5-5.2.0)	5.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.450(R5-5.2.0)
Release 6					
ARIB	ARIB STD-T63-25.450	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25450-620.pdf
ATIS	ATIS.3GPP.25.450V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.450	6.2.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 450	6.2.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v620
TTA	TTAT.3G-25.450(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.450(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-25.450	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25450-720.pdf
ATIS	ATIS.3GPP.25.450V720-2007	7.2.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.450	7.2.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 450	7.2.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v720
TTA	TTAT.3G-25.450(R7-7.2.0)	7.2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.450(R7-7.2.0)

Release 8

ARIB	ARIB STD-T63-25.450	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25450-800.pdf
ATIS	ATIS.3GPP.25.450V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.450	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 450	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325450v800
TTA	TTAT.3G-25.450(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.450(R8-8.0.0)

5.3.2.3.26 TS 25.451**UTRAN Iupc Interface Layer 1**

The present document specifies the standards allowed to implement Layer 1 on the Iupc interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.451	5.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25451-501.pdf
ATIS	T1.3GPP.25.451V501-2002	5.0.1	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.451	5.0.1	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 451	5.0.1	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325451Uv5
TTA	TTAT.3G-25.451(R5-5.0.1)	5.0.1	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R5-5.0.1)
Release 6					
ARIB	ARIB STD-T63-25.451	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25451-600.pdf
ATIS	T1.3GPP.25.451V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.451	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 451	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325451v600
TTA	TTAT.3G-25.451(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.451	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25451-700.pdf
ATIS	ATIS.3GPP.25.451V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.451	7.0.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 451	7.0.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325451v700
TTA	TTAT.3G-25.451(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-25.451	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25451-800.pdf
CCSA	CCSA-TSD-TDD-25.451	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 451	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325451v800
TTA	TTAT.3G-25.451(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.451(R8-8.0.0)

5.3.2.3.27 TS 25.452

UTRAN Iupc Interface: Signalling Transport

The present document specifies the signalling transport related to PCAP signalling to be used across the Iupc interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.452	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25452-500.pdf
ATIS	T1.3GPP.25.452V500-2002	5.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.452	5.0.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 452	5.0.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0325452Uv5
TTA	TTAE.3G-25.452(R5-5.0.0)	5.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.452(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-25.452	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25452-600.pdf
ARIB	ARIB STD-T63-25.453	6.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25453-6b0.pdf
ATIS	T1.3GPP.25.452V600-2004	6.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.452	6.0.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 452	6.0.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325452v600
TTA	TTAT.3G-25.452(R6-6.0.0)	6.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.452(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-25.452	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25452-710.pdf
ATIS	ATIS.3GPP.25.452V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.452	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 452	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325452v710
TTA	TTAT.3G-25.452(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.452(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-25.452	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25452-800.pdf
ATIS	ATIS.3GPP.25.452V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.452	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 452	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325452v800
TTA	TTAT.3G-25.452(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.452(R8-8.0.0)

5.3.2.3.28 TS 25.453**UTRAN Iupc interface PCAP signalling**

The present document specifies the Positioning Calculation Application Part (PCAP) between the Radio Network Controller (RNC) and the Stand-alone SMLC (SAS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-25.453	5.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25453-5c0.pdf
ATIS	ATIS.3GPP.25.453V5120-2007	5.12.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.453	5.12.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 453	5.12.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v5c0
TTA	TTAT.3G-25.453(R5-5.12.0)	5.12.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R5-5.12.0)
Release 6					
ATIS	ATIS.3GPP.25.453V6110-2007	6.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.453	6.11.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 453	6.11.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v6b0
TTA	TTAT.3G-25.453(R6-6.11.0)	6.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R6-6.11.0)
Release 7					
ARIB	ARIB STD-T63-25.453	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25453-7c0.pdf
ATIS	ATIS.3GPP.25.453V7120-2009	7.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.453	7.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 453	7.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v7c0
TTA	TTAT.3G-25.453(R7-7.12.0)	7.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R7-7.12.0)
Release 8					
ARIB	ARIB STD-T63-25.453	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25453-810.pdf
ATIS	ATIS.3GPP.25.453V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.453	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 453	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325453v810
TTA	TTAT.3G-25.453(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.453(R8-8.1.0)

5.3.2.3.29 TS 25.460

UTRAN Iuant Interface: General Aspects and Principles

This document is an introduction to the TSG RAN TS 25.46x series of UMTS Technical Specifications that define the Iuant Interface. The logical Iuant interface is a Node B internal interface between the implementation specific O&M function and the Remote Electrical Tilting (RET) Antenna Control unit function of the Node B.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.460V620-2006	6.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.460	6.2.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 460	6.2.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325460v620
TTA	TTAT.3G-25.460(R6-6.2.0)	6.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.460(R6-6.2.0)
Release 7					
ATIS	ATIS.3GPP.25.460V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.460	7.1.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 460	7.1.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325460v710
TTA	TTAT.3G-25.460(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.460(R7-7.1.0)
Release 8					
ATIS	ATIS.3GPP.25.460V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.460	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 460	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325460v810
TTA	TTAT.3G-25.460(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.460(R8-8.1.0)

5.3.2.3.30 TS 25.461

UTRAN Iuant Interface: Layer 1

This document specifies the standards allowed to implement Layer 1 on the Iuant interface. The specification of transmission delay requirements and O&M requirements are not in the scope of the present document.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.461V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.461	6.5.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 461	6.5.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325461v650
TTA	TTAT.3G-25.461(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.461(R6-6.5.0)
Release 7					
ATIS	ATIS.3GPP.25.461V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.461	7.5.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 461	7.5.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325461v750
TTA	TTAT.3G-25.461(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.461(R7-7.5.0)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.25.461V810-2008	8.1.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.461	8.1.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 461	8.1.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325461v810
TTA	TTAT.3G-25.461(R8-8.1.0)	8.1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.461(R8-8.1.0)

5.3.2.3.31 TS 25.462**UTRAN Iuant Interface: Signalling Transport**

This document specifies the signalling transport related to RETAP signalling to be used across the Iuant interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.462V651-2007	6.5.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.462	6.5.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 462	6.5.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325462v651
TTA	TTAT.3G-25.462(R6-6.5.1)	6.5.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.462(R6-6.5.1)
Release 7					
ATIS	ATIS.3GPP.25.462V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.462	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 462	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325462v740
TTA	TTAT.3G-25.462(R7-7.4.0)	7.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.462(R7-7.4.0)
Release 8					
ATIS	ATIS.3GPP.25.462V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.462	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 462	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325462v810
TTA	TTAT.3G-25.462(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.462(R8-8.1.0)

5.3.2.3.32 TS 25.463**UTRAN Iuant Interface: Remote Electrical Tilting (RET) Antennas Application Part (RETAP) Signaling**

This document specifies the Remote Electrical Tilting Application Part (RETAP) between the implementation specific O&M function and the RET Antenna Control unit function of the Node B. It defines the Iuant interface and its associated signalling procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.463V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.463	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 463	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325463v670
TTA	TTAT.3G-25.463(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.463(R6-6.7.0)

Release 7

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.25.463V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.463	7.5.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 463	7.5.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325463v750
TTA	TTAT.3G-25.463(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.463(R7-7.5.0)

5.3.2.3.33 TS 25.467**UTRAN Architecture for 3G HNB**

The present document specifies the UTRAN architecture for 3G Home NodeB (3G HNB).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.25.466V730-2008	7.3.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.466	7.3.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 466	7.3.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325466v730
TTA	TTAT.3G-25.466(R7-7.3.0)	7.3.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.466(R7-7.3.0)
Release 8					
ARIB	ARIB STD-T63-25.467	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25467-810.pdf
ATIS	ATIS.3GPP.25.466V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.466	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 466	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325466v830
TTA	TTAT.3G-25.466(R8-8.3.0)	8.3.0	Approved		http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.466(R8-8.3.0)

5.3.2.3.34 TS 25.468**UTRAN Iuh Interface RUA signalling**

The present document specifies the RANAP User Adaption (RUA) between the Home Node B (HNB) and the Home Node B Gateway (HNB-GW).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD T63-25.468	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25468-810.pdf
ATIS	ATIS.3GPP.25.467V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.467	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 467	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325467v810
TTA	TTAT.3G-25.467(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.467(R8-8.1.0)

5.3.2.3.35 TS 25.469

UTRAN Iuh Interface HNBAP signallingThe present document specifies the Home Node B Application Part (HNBAP) between the Home Node B (HNB) and the Home Node B Gateway (HNB-GW)

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD T63-25.469	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25469-810.pdf
ATIS	ATIS.3GPP.25.468V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.468	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 468	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0325468v810
TTA	TTAT.3G-25.468(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.468(R8-8.1.0)

5.3.2.4 25.100 series**5.3.2.4.1 TS 25.102****UE radio transmission and reception (TDD)**

This document establishes the minimum RF characteristics of the UTRA User Equipment (UE) operating in the TDD mode. The values in the TS make no allowance for measurement uncertainty in conformance testing. Test limits to be used for conformance testing are specified separately in the UE conformance test specifications TS 34.122.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-25.102	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25102-3d0.pdf
ATIS	ATIS.3GPP.25.102V3130-2007	3.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.102	3.13.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 102	3.13.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425102v3d0
Release 4					
ARIB	ARIB STD-T63-25.102	4.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25102-4c0.pdf
ATIS	ATIS.3GPP.25.102V4120-2009	4.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.102	4.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 102	4.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425102v4c0
Release 5					
ARIB	ARIB STD-T63-25.102	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25102-5e0.pdf
ATIS	ATIS.3GPP.25.102V5140-2009	5.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.102	5.14.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 102	5.14.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425102v5e0

Release 6

ARIB	ARIB STD-T63-25.102	6.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25102-6c0.pdf
ATIS	ATIS.3GPP.25.102V6120-2009	6.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.102	6.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 102	6.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425102v6c0

Release 7

ARIB	ARIB STD-T63-25.102	7.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25102-7e0.pdf
ATIS	ATIS.3GPP.25.102V7140-2009	7.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.102	7.14.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 102	7.14.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425102v7e0

Release 8

ATIS	ATIS.3GPP.25.102V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.102	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 102	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425102v830

5.3.2.4.2 TS 25.123**Requirements for support of radio resource management (TDD)**

This specification describes the requirements for support of radio resource management for TDD including requirements on measurements in UTRAN and the UE as well as on node dynamic behaviour and interaction, in terms of delay and response characteristics.

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Release 99					
ARIB	ARIB STD-T63-25.123	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25123-3e0.pdf
ATIS	T1.3GPP.25.123V3140-2004	3.14.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.123	3.14.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 123	3.14.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425123v3e0
Release 4					
ARIB	ARIB STD-T63-25.123	4.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25123-4g0.pdf
ATIS	ATIS.3GPP.25.123V4160-2009	4.16.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.123	4.16.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 123	4.16.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425123v4g0
Release 5					
ARIB	ARIB STD-T63-25.123	5.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25123-5d0.pdf
ATIS	ATIS.3GPP.25.123V5130-2009	5.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.123	5.13.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 123	5.13.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425123v5d0
Release 6					
ARIB	ARIB STD-T63-25.123	6.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25123-6c0.pdf
ATIS	ATIS.3GPP.25.123V6120-2009	6.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.123	6.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 123	6.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425123v6c0

Release 7

ARIB	ARIB STD-T63-25.123	7.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25123-780.pdf
ATIS	ATIS.3GPP.25.123V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.123	7.8.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 123	7.8.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425123v780

Release 8

ATIS	ATIS.3GPP.25.123V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.123	8.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 123	8.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425123v820

5.3.2.4.3 TS 25.105**BTS radio transmission and reception (TDD)**

This specification describes the minimum RF characteristics of the TDD mode of UTRA. The values in the TS make no allowance for measurements uncertainties in conformance testing. Test limit to be used for conformance testing are specified separately in the base station conformance test Specification TS 25.142.

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Release 99					
ARIB	ARIB STD-T63-25.105	3.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25105-3g0.pdf
ATIS	ATIS.3GPP.25.105V3160-2008	3.16.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.105	3.16.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 105	3.16.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425105v3g0
Release 4					
ARIB	ARIB STD-T63-25.105	4.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25105-4c0.pdf
ATIS	ATIS.3GPP.25.105V4120-2009	4.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.105	4.12.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 105	4.12.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425105v4c0
Release 5					
ARIB	ARIB STD-T63-25.105	5.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25105-5a0.pdf
ATIS	ATIS.3GPP.25.105V5100-2009	5.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.105	5.10.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 105	5.10.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425105v5a0
Release 6					
ARIB	ARIB STD-T63-25.105	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25105-670.pdf
ATIS	ATIS.3GPP.25.410V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
ATIS	ATIS.3GPP.25.105V670-2009	6.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.105	6.7.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 105	6.7.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425105v670

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ARIB	ARIB STD-T63-25.105	7.11.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25105-7b1.pdf
ATIS	ATIS.3GPP.25.105V7111-2009	7.11.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.105	7.11.1	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 105	7.11.1	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425105v7b0

Release 8

ATIS	ATIS.3GPP.25.105V831-2009	8.3.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.105	8.3.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 105	8.3.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425105v831

5.3.2.4.4 TS 25.142**Base station conformance testing (TDD)**

This specification describes the radio frequency (RF) test methods and conformance requirements for UTRA base transceiver stations (BTS) operating in the TDD mode. These have been derived from, and are consistent with, the core UTRA specifications specified in the requirements reference sub-clause of each test. The maximum acceptable measurement uncertainty is specified in the TS for each test, where appropriate.

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Release 99					
ARIB	ARIB STD-T63-25.142	3.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25142-3f0.pdf
ATIS	ATIS.3GPP.25.142V3150-2007	3.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.142	3.15.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 142	3.15.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425142v3f0
Release 4					
ARIB	ARIB STD-T63-25.142	4.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25142-4d0.pdf
CCSA	CCSA-TSD-TDD-25.142	4.13.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 142	4.13.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425142v4d0
Release 5					
ARIB	ARIB STD-T63-25.142	5.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25142-5b0.pdf
ATIS	ATIS.3GPP.25.142V5110-2009	5.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.142	5.11.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 142	5.11.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425142v5b0
Release 6					
ARIB	ARIB STD-T63-25.142	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25142-690.pdf
ATIS	ATIS.3GPP.25.142V690-2009	6.9.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.142	6.9.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 142	6.9.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425142v690
Release 7					
ARIB	ARIB STD-T63-25.142	7.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25142-7b0.pdf
ATIS	ATIS.3GPP.25.142V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.142	7.11.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 142	7.11.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425142v7b0

Release 8

ATIS	ATIS.3GPP.25.142V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.142	8.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 142	8.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425142v820

5.3.2.4.5 TS 25.113**Base station EMC (see Note 1)**

This specification describes the assessment of base stations and associated ancillary equipment in respect of EMC. NOTE 1 – This specification does not include the antenna port immunity and emissions.

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Release 99					
ARIB	ARIB STD-T63-25.113	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A25113-350.pdf
ATIS	T1.3GPP.25.113V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.113	3.5.0	Published	May 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 113	3.5.0	Published	May 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113UR5
TTA	TTAE.3G-25.113(R99-3.5.0)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-25.113(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-25.113	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A25113-440.pdf
ATIS	T1.3GPP.25.113V440-2003	4.4.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.113	4.4.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 113	4.4.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v440
TTA	TTAT.3G-25.113(R4-4.4.0)	4.4.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R4-4.4.0)
Release 5					
ARIB	ARIB STD-T63-25.113	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A25113-550.pdf
ATIS	T1.3GPP.25.113V550-2004	5.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.113	5.5.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 113	5.5.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v550
TTA	TTAT.3G-25.113(R5-5.5.0)	5.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R5-5.5.0)
Release 6					
ARIB	ARIB STD-T63-25.113	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A25113-640.pdf
ATIS	ATIS.3GPP.25.113V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.113	6.4.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 113	6.4.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v640
TTA	TTAT.3G-25.113(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R6-6.4.0)
Release 7					
ARIB	ARIB STD-T63-25.113	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25113-760.pdf
ATIS	ATIS.3GPP.25.113V760-2007	7.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.113	7.6.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 113	7.6.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v760
TTA	TTAT.3G-25.113(R7-7.6.0)	7.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R7-7.6.0)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-25.113	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25113-840.pdf
ATIS	ATIS.3GPP.25.113V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.113	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 113	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425113v840
TTA	TTAT.3G-25.113(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.113(R8-8.4.0)

5.3.2.4.6 TS 25.144**User Equipment (UE) and Mobile Station (MS) over the air performance requirements**

The present document establishes Over the Air antenna minimum requirements for User Equipment (UE) and Mobile Station (MS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ARIB	ARIB STD-T63-25.144	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A25144-700.pdf
CCSA	CCSA-TSD-TDD-25.144	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 144	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0425144v700
Release 8					
ARIB	ARIB STD-T63-25.144	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A25144-810.pdf
ATIS	ATIS.3GPP.25.144V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-25.144	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 125 144	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0425144v810
TTA	TTAT.3G-25.144(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-25.144(R8-8.1.0)

5.3.2.5 34.100 series**5.3.2.5.1 TS 34.108****Common Test Environments for User Equipment (UE) Conformance Testing**

This document contains definitions of reference conditions and test signals, default parameters, reference Radio Bearer configurations, common requirements for test equipment and generic set-up procedures for use in UE conformance tests.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.108	3.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34108-3g0.pdf
ATIS	ATIS.3GPP.34.108V3160-2005	3.16.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.108	3.16.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 108	3.16.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134108v3g0
TTA	TTAT.3G-34.108(R99-3.16.0)	3.16.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R99-3.16.0)

Release 4

ARIB	ARIB STD-T63-34.108	4.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34108-4b0.pdf
ATIS	ATIS.3GPP.34.108V4110-2005	4.11.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.108	4.11.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 108	4.11.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134108v4b0
TTA	TTAT.3G-34.108(R4-4.11.0)	4.11.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R4-4.11.0)

Release 5

ARIB	ARIB STD-T63-34.108	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34108-560.pdf
ATIS	ATIS.3GPP.34.108V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.108	5.6.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 108	5.6.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v560
TTA	TTAT.3G-34.108(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-34.108	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34108-660.pdf
ATIS	ATIS.3GPP.34.108V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.108	6.6.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 108	6.6.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v660
TTA	TTAT.3G-34.108(R6-6.6.0)	6.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R6-6.6.0)

Release 7

ARIB	ARIB STD-T63-34.108	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34108-720.pdf
ATIS	ATIS.3GPP.34.108V720-2007	7.2.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.108	7.2.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 108	7.2.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v720
TTA	TTAT.3G-34.108(R7-7.2.0)	7.2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R7-7.2.0)

Release 8

ARIB	ARIB STD-T63-34.108	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34108-860.zip
ATIS	ATIS.3GPP.34.108V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.108	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 108	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534108v860
TTA	TTAT.3G-34.108(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.108(R8-8.6.0)

5.3.2.5.2 TS 34.109**Logical Test Interface (TDD and FDD)**

This document specifies for User Equipment (UE), in UMTS system, for FDD and TDD modes, those UE functions that are required for conformance testing purposes.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.109	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34109-3a0.pdf
ATIS	ATIS.3GPP.34.109V3100-2005	3.10.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.109	3.10.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 109	3.10.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v3a0
TTA	TTAT.3G-34.109(R99-3.10.0)	3.10.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R99-3.10.0)

Release 4

ARIB	ARIB STD-T63-34.109	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34109-460.pdf
ATIS	ATIS.3GPP.34.109V460-2005	4.6.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.109	4.6.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 109	4.6.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v460
TTA	TTAT.3G-34.109(R4-4.6.0)	4.6.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R4-4.6.0)

Release 5

ARIB	ARIB STD-T63-34.109	5.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34109-550.pdf
ATIS	ATIS.3GPP.34.109V550-2006	5.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.109	5.5.0	Published	Jul 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 109	5.5.0	Published	Jul 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v550
TTA	TTAT.3G-34.109(R5-5.5.0)	5.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R5-5.5.0)

Release 6

ARIB	ARIB STD-T63-34.109	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34109-640.pdf
ATIS	ATIS.3GPP.34.109V640-2007	6.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.109	6.4.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 109	6.4.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v640
TTA	TTAT.3G-34.109(R6-6.4.0)	6.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R6-6.4.0)

Release 7

ARIB	ARIB STD-T63-34.109	7.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34109-730.pdf
ATIS	ATIS.3GPP.34.109V730-2009	7.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.109	7.3.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 109	7.3.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v730
TTA	TTAT.3G-34.109(R7-7.3.0)	7.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R7-7.3.0)

Release 8

ARIB	ARIB STD-T63-34.109	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34109-800.pdf
ATIS	ATIS.3GPP.34.109V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.109	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 109	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0234109v800
TTA	TTAT.3G-34.109(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.109(R8-8.0.0)

5.3.2.5.3 TS 34.122

Terminal Conformance Specification, Radio Transmission and Reception (TDD)

This document specifies the Radio Frequency (RF) test methods and conformance requirements for UTRA User Equipment (UE) operating in the TDD mode. These have been derived from, and are consistent with, the core UTRA specifications. The maximum acceptable measurement uncertainty is specified in the TS for each test, where appropriate.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.122	3.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34122-3c0.pdf
ATIS	T1.3GPP.34.122V3120-2004	3.12.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.122	3.12.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 122	3.12.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134122v3c0
Release 4					
ARIB	ARIB STD-T63-34.122	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34122-4a0.pdf
ATIS	T1.3GPP.34.122V4100-2004	4.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.122	4.10.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 122	4.10.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134122v4a0
Release 5					
ARIB	ARIB STD-T63-34.122	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34122-570.pdf
ATIS	ATIS.3GPP.34.122V570-2007	5.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.122	5.7.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 122	5.7.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534122v570
Release 6					
ARIB	ARIB STD-T63-34.122	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34122-600.pdf
ATIS	ATIS.3GPP.34.122V600-2007	6.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.122	6.0.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 122	6.0.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534122v600
Release 7					
ARIB	ARIB STD-T63-34.122	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34122-760.zip
ATIS	ATIS.3GPP.34.122V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.122	7.6.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 122	7.6.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534122v760
Release 8					
ATIS	ATIS.3GPP.34.122V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.122	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 122	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534122v810

5.3.2.5.4 TS 34.123-1

UE Conformance Specification, Part 1 – Conformance specification

This document specifies the protocol conformance testing for the 3rd Generation User Equipment (UE). This is the first part of a multi-part test specification.

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Release 99					
ARIB	ARIB STD-T63-34.123-1	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34123-1-350.pdf
ATIS	T1.3GPP.34.123-1V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-1	3.5.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-1	3.5.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-1UR6
TTA	TTAE.3G-34.123-1(R99350)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-34.123-1(R99350)
Release 4					
ARIB	ARIB STD-T63-34.123-1	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34123-1-430.pdf
ATIS	T1.3GPP.34.123-1V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-1	4.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-1	4.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-1v430
TTA	TTAT.3G-34.123-1(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-34.123-1	5.13.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34123-1-5d1.pdf
ATIS	ATIS.3GPP.34.123-1V5131-2006	5.13.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-1	5.13.1	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-1	5.13.1	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v5d1
TTA	TTAT.3G-34.123-1(R5-5.13.1)	5.13.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R5-5.13.1)
Release 6					
ARIB	ARIB STD-T63-34.123-1	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34123-1-670.pdf
ATIS	ATIS.3GPP.34.123-1V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-1	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-1	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v670
TTA	TTAT.3G-34.123-1(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R6-6.7.0)
Release 7					
ARIB	ARIB STD-T63-34.123-1	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34123-1-710.pdf
ATIS	ATIS.3GPP.34.123-1V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-1	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-1	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v710
TTA	TTAT.3G-34.123-1(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-34.123-1	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34123-1-860.zip
ATIS	ATIS.3GPP.34.123-1V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-1	8.6.0	Published	May 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-1	8.6.0	Published	May 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-1v860
TTA	TTAT.3G-34.123-1(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-1(R8-8.6.0)

5.3.2.5.5 TS 34.123-2

UE Conformance Specification, Part 2 – ICS

This document provides the Implementation Conformance Statement (ICS) proforma for 3rd Generation User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 and ETS 300 406. This document also specifies a recommended applicability statement for the test cases included in TS 34.123-1. These applicability statements are based on the features implemented in the UE.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.123-2	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34123-2-350.pdf
ATIS	T1.3GPP.34.123-2V350-2002	3.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-2	3.5.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-2	3.5.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-2UR4
TTA	TTAE.3G-34.123-2(R99350)	3.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-34.123-2(R99350)
Release 4					
ARIB	ARIB STD-T63-34.123-2	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34123-2-430.pdf
ATIS	T1.3GPP.34.123-2V430-2003	4.3.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-2	4.3.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-2	4.3.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0134123-2v430
TTA	TTAT.3G-34.123-2(R4-4.3.0)	4.3.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R4-4.3.0)
Release 5					
ARIB	ARIB STD-T63-34.123-2	5.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34123-2-5d0.pdf
ATIS	ATIS.3GPP.34.123-2V5130-2006	5.13.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-2	5.13.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-2	5.13.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v5d0
TTA	TTAT.3G-34.123-2(R5-5.13.0)	5.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R5-5.13.0)
Release 6					
ARIB	ARIB STD-T63-34.123-2	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34123-2-670.pdf
ATIS	ATIS.3GPP.34.123-2V670-2007	6.7.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-2	6.7.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-2	6.7.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v670
TTA	TTAT.3G-34.123-2(R6-6.7.0)	6.7.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R6-6.7.0)
Release 7					
ARIB	ARIB STD-T63-34.123-2	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34123-2-710.pdf
ATIS	ATIS.3GPP.34.123-2V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-2	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-2	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v710
TTA	TTAT.3G-34.123-2(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-34.123-2	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34123-2-860.zip
ATIS	ATIS.3GPP.34.123-2V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.123-2	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 123-2	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0534123-2v860
TTA	TTAT.3G-34.123-2(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.123-2(R8-8.6.0)

5.3.2.5.6 TS 34.124

Electromagnetic compatibility (EMC) requirements for Mobile terminals and ancillary equipment

This document establishes the essential EMC requirements for “3rd generation” digital cellular mobile terminal equipment and ancillary accessories in combination with a 3GPP user equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-34.124	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A34124-340.pdf
ATIS	T1.3GPP.34.124V340-2004	3.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.124	3.4.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 124	3.4.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v340
TTA	TTAT.3G-34.124(R99-3.4.0)	3.4.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R99-3.4.0)
Release 4					
ARIB	ARIB STD-T63-34.124	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A34124-420.pdf
ATIS	T1.3GPP.34.124V420-2004	4.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.124	4.2.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 124	4.2.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v420
TTA	TTAT.3G-34.124(R4-4.2.0)	4.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-34.124	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A34124-540.pdf
ATIS	ATIS.3GPP.34.124V540-2005	5.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.124	5.4.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 124	5.4.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v540
TTA	TTAT.3G-34.124(R5-5.4.0)	5.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R5-5.4.0)
Release 6					
ARIB	ARIB STD-T63-34.124	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34124-620.pdf
ATIS	ATIS.3GPP.34.124V620-2007	6.2.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.124	6.2.0	Published	Jun 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 124	6.2.0	Published	Jun 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v620
TTA	TTAT.3G-34.124(R6-6.2.0)	6.2.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R6-6.2.0)
Release 7					
ARIB	ARIB STD-T63-34.124	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34124-750.pdf
ATIS	ATIS.3GPP.34.124V750-2007	7.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.124	7.5.0	Published	Jan 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 124	7.5.0	Published	Jan 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v750
TTA	TTAT.3G-34.124(R7-7.5.0)	7.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R7-7.5.0)
Release 8					
ARIB	ARIB STD-T63-34.124	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A34124-830.pdf
ATIS	ATIS.3GPP.34.124V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.124	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 124	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0434124v830
TTA	TTAT.3G-34.124(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.124(R8-8.3.0)

5.3.2.6 36.200 series**5.3.2.6.1 TS 36.201****Evolved Universal Terrestrial Radio Access (E-UTRA); Long Term Evolution (LTE) physical layer; General description**

This specification describes an overview of the physical layer of the EUTRA radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.201	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36201-830.pdf
ATIS	ATIS.3GPP.36.201V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.201	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 201	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136201v830
TTA	TTAT.3G-36.201(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.201(R8-8.3.0)

5.3.2.6.2 TS 36.211**Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation.**

This specification describes the physical channels for evolved UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.211	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36211-860.pdf
ATIS	ATIS.3GPP.36.211V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.211	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 211	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136211v860
TTA	TTAT.3G-36.211(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.211(R8-8.6.0)

5.3.2.6.3 TS 36.212**Evolved Universal Terrestrial Radio Access (E-UTRA); Multiplexing and channel coding.**

This specification describes the coding, multiplexing and mapping to physical channels for E_UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.212	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36212-860.pdf
ATIS	ATIS.3GPP.36.212V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.212	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 212	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136212v860
TTA	TTAT.3G-36.212(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.212(R8-8.6.0)

5.3.2.6.4 TS 36.213**Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures.**

This specification describes the characteristics of the physical layer procedures of E-UTRA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.213	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36213-860.pdf
ATIS	ATIS.3GPP.36.213V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.213	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 213	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136213v860
TTA	TTAT.3G-36.213(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.213(R8-8.6.0)

5.3.2.6.5 TS 36.214**Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer; Measurements**

This specification describes the measurements done at the UE and network in order to support operation in idle mode and connected mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.214	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36214-860.pdf
ATIS	ATIS.3GPP.36.214V860-2009	8.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.214	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 214	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0136214v860
TTA	TTAT.3G-36.214(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.214(R8-8.6.0)

5.3.2.7 36.300 series**5.3.2.7.1 TS 36.300****Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description (Stage 2)**

This specification describes an overview and overall description of the E-UTRA radio interface and E-UTRAN architecture and radio interface protocol architecture.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.300	8.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36300-880.pdf
ATIS	ATIS.3GPP.36.300V880-2009	8.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.300	8.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 300	8.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236300v880
TTA	TTAT.3G-36.300(R8-8.8.0)	8.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.300(R8-8.8.0)

5.3.2.7.2 TS 36.302**Evolved Universal Terrestrial Radio Access (E-UTRA); Services provided by the physical layer**

This specification describes the services provided by the physical layer of E-UTRA to upper layers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.302	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36302-810.pdf
ATIS	ATIS.3GPP.36.302V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.302	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 302	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236302v810
TTA	TTAT.3G-36.302(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.302(R8-8.1.0)

5.3.2.7.3 TS 36.304**Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) procedures in idle mode**

This specification describes the Access Stratum (AS) part of the Idle Mode procedures applicable to a UE and the model for the functional division between the NAS and AS in a UE.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.304	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36304-850.pdf
ATIS	ATIS.3GPP.36.304V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.304	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 304	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236304v850
TTA	TTAT.3G-36.304(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.304(R8-8.5.0)

5.3.2.7.4 TS 36.306**Evolved Universal Terrestrial Radio Access (E-UTRA); UE Radio Access Capabilities**

This specification defines the E-UTRA UE Radio Access Capability Parameters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.306	8.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36306-830.pdf
ATIS	ATIS.3GPP.36.306V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.306	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 306	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236306v830
TTA	TTAT.3G-36.306(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.306(R8-8.3.0)

5.3.2.7.5 TS 36.314**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Layer 2 – Measurements**

The present document contains the description and definition of the measurements performed by E-UTRAN that are transferred over the standardised interfaces in order to support E-UTRA radio link operations, radio resource management (RRM), network operations and maintenance (OAM), and self-organising networks (SON).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.314	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36314-810.pdf
ATIS	ATIS.3GPP.36.314V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.314	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 314	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236314v810
TTA	TTAT.3G-36.314(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.314(R8-8.1.0)

5.3.2.7.6 TS 36.321**Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification**

This specification describes the E-UTRA MAC protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.321	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36321-850.pdf
ATIS	ATIS.3GPP.36.321V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.321	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 321	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236321v850
TTA	TTAT.3G-36.321(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.321(R8-8.5.0)

5.3.2.7.7 TS 36.322**Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification**

This specification describes the E-UTRA Radio Link Control (RLC) protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.322	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36322-850.pdf
ATIS	ATIS.3GPP.36.322V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.322	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 322	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236322v850
TTA	TTAT.3G-36.322(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.322(R8-8.5.0)

5.3.2.7.8 TS 36.323**Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification**

This specification describes the Packet Data Convergence Protocol (PDCP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.323	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36323-850.pdf
ATIS	ATIS.3GPP.36.323V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.323	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 323	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236323v850
TTA	TTAT.3G-36.323(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.323(R8-8.5.0)

5.3.2.7.9 TS 36.331**Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) protocol specification**

This specification describes the Radio Resource Control protocol for the UE-eUTRAN radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.331	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36331-850.pdf
ATIS	ATIS.3GPP.36.331V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.331	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 331	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0236331v850
TTA	TTAT.3G-36.331(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.331(R8-8.5.0)

5.3.2.8 36.400 series**5.3.2.8.1 TS 36.401****Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Architecture description**

This specification describes the overall architecture of the EUTRAN, including internal interfaces and assumptions on the radio, S1 and X2 interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.401	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36401-850.pdf
ATIS	ATIS.3GPP.36.401V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.401	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 401	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336401v850
TTA	TTAT.3G-36.401(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.401(R8-8.5.0)

5.3.2.8.2 TS 36.410**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 general aspects and principles**

This specification provides an introduction to the 3GPP TS 36.41x series of technical specifications that define the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.410	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36410-820.pdf
ATIS	ATIS.3GPP.36.410V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.410	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 410	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336410v820
TTA	TTAT.3G-36.410(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.410(R8-8.2.0)

5.3.2.8.3 TS 36.411**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 layer 1**

This specification describes the standards allowed to implement Layer 1 on the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.411	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36411-810.pdf
ATIS	ATIS.3GPP.36.411V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.411	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 411	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336411v810
TTA	TTAT.3G-36.411(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.411(R8-8.1.0)

5.3.2.8.4 TS 36.412**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 signalling transport**

This specification describes the Signalling Transport to be used across S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.412	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36412-850.pdf
ATIS	ATIS.3GPP.36.412V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.412	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 412	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336412v850
TTA	TTAT.3G-36.412(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.412(R8-8.5.0)

5.3.2.8.5 TS 36.413**Evolved Universal Terrestrial Access (E-UTRA) ; S1 Application Protocol (S1 AP)**

This specification describes the E-UTRAN radio network layer signalling protocol for the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.413	8.5.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36413-851.pdf
ATIS	ATIS.3GPP.36.413V851-2009	8.5.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.413	8.5.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 413	8.5.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336413v851
TTA	TTAT.3G-36.413(R8-8.5.1)	8.5.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.413(R8-8.5.1)

5.3.2.8.6 TS 36.414**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); S1 data transport**

This specification describes the standards for user data transport protocols and related signalling protocols to establish user plane transport bearers over the S1 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.414	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36414-840.pdf
ATIS	ATIS.3GPP.36.414V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.414	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 414	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336414v840
TTA	TTAT.3G-36.414(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.414(R8-8.4.0)

5.3.2.8.7 TS 36.420**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 general aspects and principles**

This specification provides an introduction to the TSG RAN TS 36.42x series of UMTS Technical Specifications that define the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.420	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36420-810.pdf
ATIS	ATIS.3GPP.36.420V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.420	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 420	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336420v810
TTA	TTAT.3G-36.414(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.414(R8-8.1.0)

5.3.2.8.8 TS 36.421**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 layer 1**

This specification describes the standards allowed to implement Layer 1 on the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.421	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36421-800.pdf
ATIS	ATIS.3GPP.36.421V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.421	8.0.0	Published	Nov 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 421	8.0.0	Published	Nov 08	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0336421v800
TTA	TTAT.3G-36.421(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.421(R8-8.0.0)

5.3.2.8.9 TS 36.422**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 signalling transport**

This specification describes the Signalling Transport to be used across X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.422	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36422-850.pdf
ATIS	ATIS.3GPP.36.422V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.422	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 422	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336422v850
TTA	TTAT.3G-36.422(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.422(R8-8.5.0)

5.3.2.8.10 TS 36.423**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 Application Protocol (X2AP)**

This specification describes the E-UTRAN radio network layer signalling protocol for the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.423	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36423-850.pdf
ATIS	ATIS.3GPP.36.423V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.423	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 423	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336423v850
TTA	TTAT.3G-36.423(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.423(R8-8.5.0)

5.3.2.8.11 TS 36.424**Evolved Universal Terrestrial Radio Access Network (E-UTRAN); X2 data transport**

This specification describes the standards for user data transport protocols and related signalling protocols to establish user plane transport bearers over the X2 interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.424	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36423-850.pdf
ATIS	ATIS.3GPP.36.424V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.424	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 424	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0336424v850
TTA	TTAT.3G-36.424(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.424(R8-8.5.0)

5.3.2.9 36.100 series**5.3.2.9.1 TS 36.101****Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception**

This specification describes the User Equipment (UE) minimum RF characteristics of E-UTRA for both FDD and TDD modes.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.101	8.5.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36101-851.pdf
ATIS	ATIS.3GPP.36.101V851-2009	8.5.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.101	8.5.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 101	8.5.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436101v851
TTA	TTAT.3G-36.101(R8-8.5.1)	8.5.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.101(R8-8.5.1)

5.3.2.9.2 TS 36.104**Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception**

This specification describes the Base Station minimum RF characteristics of E-UTRA in paired and unpaired bands.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.104	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36104-850.pdf
ATIS	ATIS.3GPP.36.104V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.104	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 104	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436104v850
TTA	TTAT.3G-36.104(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.104(R8-8.5.0)

5.3.2.9.3 TS 36.113**Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) and repeater ElectroMagnetic Compatibility (EMC)**

The present document covers the assessment of E-UTRA base stations, repeaters and associated ancillary equipment in respect of Electromagnetic Compatibility (EMC).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.113	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36113-810.pdf
ATIS	ATIS.3GPP.36.113V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.113	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 113	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0436113v810
TTA	TTAT.3G-36.113(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.113(R8-8.1.0)

5.3.2.9.4 TS 36.124**Evolved Universal Terrestrial Radio Access (E-UTRA); Electromagnetic compatibility (EMC) requirements for mobile terminals and ancillary equipment**

The present document establishes the essential EMC requirements for “3rd Generation” digital cellular mobile terminal equipment and ancillary accessories in combination with a 3GPP E-UTRA user equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.124	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36124-800.pdf
CCSA	CCSA-TSD-TDD-36.124	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 124	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0436124v800
TTA	TTAT.3G-36.124(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.124(R8-8.0.0)

5.3.2.9.5 TS 36.133**Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management**

This specification specifies requirements for support of Radio Resource Management for the FDD and TDD modes of Evolved UTRA. These requirements include requirements on measurements in UTRAN and the UE as well as requirements on node dynamical behaviour and interaction, in terms of delay and response characteristics.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.133	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36133-850.pdf
ATIS	ATIS.3GPP.36.133V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.133	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 133	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436133v850
TTA	TTAT.3G-36.133(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.133(R8-8.5.0)

5.3.2.9.6 TS 36.141**Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) conformance testing**

The present document specifies the Radio Frequency (RF) test methods and conformance requirements for E-UTRA Base Stations (BS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.141	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36141-820.pdf
ATIS	ATIS.3GPP.36.141V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.141	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 141	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0436141v820
TTA	TTAT.3G-36.141(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.141(R8-8.2.0)

5.3.2.10 36.500 series

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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5.3.2.10.1**Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Common test environments for User Equipment (UE) conformance testing**

The present document contains definitions of reference conditions and test signals, default parameters, reference radio bearer configurations used in radio bearer interoperability testing, common radio bearer configurations for other test purposes, common requirements for test equipment and generic set-up procedures for use in conformance tests for the 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.508	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36508-810.zip
ATIS	ATIS.3GPP.36.508V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
ETSI	ETSI TS 136 508	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536508v810
TTA	TTAT.3G-36.508(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.508(R8-8.1.0)

5.3.2.10.2 TS 36.509**Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); Special conformance testing function for User Equipment (UE)**

The present document defines for 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE) those special functions and their activation methods that are required in User Equipment (UE) for conformance testing purposes.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.509	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36509-810.pdf
ATIS	ATIS.3GPP.36.509V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.509	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 509	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536509v810
TTA	TTAT.3G-36.509(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.509(R8-8.1.0)

5.3.2.10.3 TS 36.521-1**Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: conformance testing**

The present document specifies the measurement procedures for the conformance test of the 3rd Generation EPS (E-UTRA/EPC) compliant user equipment (UE) that contain transmitting characteristics, receiving characteristics and performance requirements.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.521-1	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36521-1-810.pdf
ATIS	ATIS.3GPP.36.521-1V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.521-1	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 521-1	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536521-1v810
TTA	TTAT.3G-36.521-1(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.521-1(R8-8.1.0)

5.3.2.10.4 TS 36.521-2**Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 2: Implementation Conformance Statement (ICS)**

The present document provides the Implementation Conformance Statement (ICS) proforma and recommended Test Case (TC) applicability for 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 and ISO/IEC 9646-7.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.521-2	8.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36521-2-801.pdf
ATIS	ATIS.3GPP.36.521-2V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.521-2	8.0.1	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 521-2	8.0.1	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGR-0536521-2v801
TTA	TTAT.3G-36.521-2(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.521-2(R8-8.0.1)

5.3.2.10.5 TS 36.523-1**Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 1: Protocol conformance specification**

The present document specifies the protocol conformance testing for the 3rd Generation EPS (E-UTRA/EPC) compliant User Equipment (UE).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.523-1	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36523-1-810.pdf
ATIS	ATIS.3GPP.36.523-1V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.523-1	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 523-1	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536523-1v810
TTA	TTAT.3G-36.523-1(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.523-1(R8-8.1.0)

5.3.2.10.6 TS 36.523-2

Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN) and Evolved Packet Core (EPC); User Equipment (UE) conformance specification; Part 2: ICS

The present document provides the Implementation Conformance Statement (ICS) proforma and recommended Test Case (TC) applicability for 3rd Generation User Equipment (UE), in compliance with the relevant EPS (E-UTRA/EPC) requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 and ISO/IEC 9646-7.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-36.523-2	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A36523-2-810.pdf
ATIS	ATIS.3GPP.36.523-2V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-36.523-2	8.1.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 136 523-2	8.1.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGR-0536523-2v810
TTA	TTAT.3G-36.523-2(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-36.523-2(R8-8.1.0)

5.3.2.11 Core network aspects

5.3.2.11.1 TS 23.108

Mobile radio interface Layer 3 specification core network protocols – Stage 2

This specification describes the procedures used at the radio interface for Call Control (CC), Mobility Management (MM) and Session Management (SM). It contains examples of the structured procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.108V320-2002	3.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.108	3.2.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 108	3.2.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108URI
TTA	TTAE.3G-23.108(R99)	3.2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.108(R99)
TTC	TS-3GA-23.108(R99)v3.2.0	3.2.0	Published	Oct 00	http://www.ttc.or.jp/imt/ts/ts23108r99v320.pdf
Release 4					
ATIS	T1.3GPP.23.108V401-2004	4.0.1	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.108	4.0.1	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 108	4.0.1	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108v401
TTA	TTAT.3G-23.108(R4-4.0.1)	4.0.1	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R4-4.0.1)
TTC	TS-3GA-23.108(Rel4)v4.0.0	4.0.0	Published	Oct 00	http://www.ttc.or.jp/imt/ts/ts23108rel4v400.pdf
Release 5					
ATIS	T1.3GPP.23.108V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.108	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 108	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108v500
TTA	TTAT.3G-23.108(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R5-5.0.0)
TTC	TS-3GA-23.108(Rel5)v5.0.0	5.0.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts23108rel5v500.pdf

Release 6

ATIS	ATIS.3GPP.23.108V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.108	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 108	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123108v600
TTA	TTAT.3G-23.108(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R6-6.0.0)
TTC	TS-3GA-23.108(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts23108rel6v600.pdf

Release 7

ATIS	ATIS.3GPP.23.108V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.108	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 108	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123108v700
TTA	TTAT.3G-23.108(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R7-7.0.0)
TTC	TS-3GA-23.108(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23108rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.23.108V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.108	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 108	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123108v800
TTA	TTAT.3G-23.108(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.108(R8-8.0.0)
TTC	TS-3GA-23.108(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23108rel8v800.pdf

5.3.2.11.2 TS 23.110**UMTS access stratum services and functions**

This specification describes the detailed specifications of the protocols which rule the information flows, both control and user data, between the access stratum and the parts of UMTS outside the access stratum, and of the detailed specifications of the UTRAN. These detailed specifications are to be found in other technical specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.110V340-2002	3.4.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.110	3.4.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 110	3.4.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110UR1
TTA	TTAE.3G-23.110(R99)	3.4.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.110(R99)
TTC	TS-3GA-23.110(R99)v3.4.0	3.4.0	Published	Oct 00	http://www.ttc.or.jp/imt/ts/ts23110r99v340.pdf
Release 4					
CCSA	CCSA-TSD-TDD-23.110	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 110	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110Uv4
TTA	TTAE.3G-23.110(R4)	4.0.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.110(R4)
TTC	TS-3GA-23.110(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts23110rel4v400.pdf

Release 5

ATIS	T1.3GPP.23.110V500-2004	5.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.110	5.0.0	Published	Dec 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 110	5.0.0	Published	Dec 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v500
TTA	TTAT.3G-23.110(R5-5.0.0)	5.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R5-5.0.0)
TTC	TS-3GA-23.110(Rel5)v5.0.0	5.0.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts23110rel5v500.pdf

Release 6

ATIS	ATIS.3GPP.23.110V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.110	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 110	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v600
TTA	TTAT.3G-23.110(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R6-6.0.0)
TTC	TS-3GA-23.110(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts23110rel6v600.pdf

Release 7

ATIS	ATIS.3GPP.23.110V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.110	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 110	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v700
TTA	TTAT.3G-23.110(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R7-7.0.0)
TTC	TS-3GA-23.110(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23110rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.23.110V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.110	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 110	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223110v800
TTA	TTAT.3G-23.110(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.110(R8-8.0.0)
TTC	TS-3GA-23.110(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23110rel8v800.pdf

5.3.2.11.3 TS 23.122**Functions related to Mobile Stations (MS) in idle mode and group receive mode**

This specification provides an overview of the tasks undertaken by a Mobile Station (MS) when in idle mode (that is, switched on but not having a dedicated channel allocated, e.g. not making or receiving a call; or when in group receive mode, that is, receiving a group call or broadcast call but not having a dedicated connection). It also describes the corresponding network functions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.122V3100-2004	3.10.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.122	3.10.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 122	3.10.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123122v3a0
TTA	TTAT.3G-23.122(R99-3.10.0)	3.10.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R99-3.10.0)
TTC	TS-3GA-23.122(R99)v3.10.0	3.10.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23122r99v3a0.pdf

Release 4

ATIS	T1.3GPP.23.122V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.122	4.4.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 122	4.4.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123122v440
TTA	TTAT.3G-23.122(R4-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R4-4.4.0)
TTC	TS-3GA-23.122(Rel4)v4.4.0	4.4.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23122rel4v440.pdf

Release 5

ATIS	T1.3GPP.23.122V530-2004	5.3.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.122	5.3.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 122	5.3.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0123122v530
TTA	TTAT.3G-23.122(R5-5.3.0)	5.3.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R5-5.3.0)
TTC	TS-3GA-23.122(Rel5)v5.3.0	5.3.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23122rel5v530.pdf

Release 6

ATIS	ATIS.3GPP.23.122V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.122	6.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 122	6.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123122v650
TTA	TTAT.3G-23.122(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R6-6.5.0)
TTC	TS-3GA-23.122(Rel6)v6.5.0	6.5.0	Published	Jul 05	http://www.ttc.or.jp/imt/ts/ts23122rel6v650.pdf

Release 7

ATIS	ATIS.3GPP.23.122V7121-2008	7.12.1	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.122	7.12.1	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 122	7.12.1	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123122v7c1
TTA	TTAT.3G-23.122(R7-7.12.1)	7.12.1	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R7-7.12.1)
TTC	TS-3GA-23.122(Rel7)v7.12.1	7.12.1	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts23122rel7v7c1.pdf

Release 8

ATIS	ATIS.3GPP.23.122V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.122	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 122	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123122v850
TTA	TTAT.3G-23.122(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.122(R8-8.5.0)
TTC	TS-3GA-23.122(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23122rel8v850.pdf

5.3.2.11.4 TS 24.007

Mobile radio interface signalling Layer 3 – general aspects

This specification describes the principal architecture of Layer 3 and its sub-layers on the GSM Um interface, i.e. the interface between mobile station (MS) and network; for the CM sub-layer, the description is restricted to paradigmatic examples, CC, supplementary services, and short message services for non-general packet radio service (GPRS) services. It also defines the basic message format and error handling applied by the Layer 3 protocols.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.007V3100-2005	3.10.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.007	3.10.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 007	3.10.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124007v3a0
TTA	TTAT.3G-24.007(R99-3.10.0)	3.10.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R99-3.10.0)
TTC	TS-3GA-24.007(R99)v3.10.0	3.10.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts24007r99v3a0.pdf
Release 4					
ATIS	ATIS.3GPP.24.007V440-2005	4.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.007	4.4.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 007	4.4.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124007v440
TTA	TTAT.3G-24.007(R4-4.4.0)	4.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R4-4.4.0)
TTC	TS-3GA-24.007(Rel4)v4.4.0	4.4.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24007rel4v440.pdf
Release 5					
ATIS	ATIS.3GPP.24.007V540-2006	5.4.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.007	5.4.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 007	5.4.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v540
TTA	TTAT.3G-24.007(R5-5.4.0)	5.4.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R5-5.4.0)
TTC	TS-3GA-24.007(Rel5)v5.4.0	5.4.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts24007rel5v540.pdf
Release 6					
ATIS	ATIS.3GPP.24.007V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.007	6.5.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 007	6.5.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v650
TTA	TTAT.3G-24.007(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R6-6.5.0)
TTC	TS-3GA-24.007(Rel6)v6.5.0	6.5.0	Published	Nov 05	http://www.ttc.or.jp/imt/ts/ts24007rel6v650.pdf
Release 7					
ATIS	ATIS.3GPP.24.007V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.007	7.0.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 007	7.0.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v700
TTA	TTAT.3G-24.007(R7-7.0.0)	7.0.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R7-7.0.0)
TTC	TS-3GA-24.007(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24007rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.24.007V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.007	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 007	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124007v810
TTA	TTAT.3G-24.007(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R8-8.1.0)
TTC	TS-3GA-24.007(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24007rel8v810.pdf

5.3.2.11.5 TS 24.008**Mobile radio interface Layer 3 specification; core network protocols – Stage 3**

This specification describes the procedures used at the radio interface for Call Control, Mobility Management and Session Management. The procedures currently described are for the CC of circuit-switched connections, SM for GPRS services, MM and radio resource management for circuit-switched and GPRS services. MBMS is also added.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.008V3200-2006	3.20.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.008	3.20.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 008	3.20.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v3k0
TTA	TTAT.3G-24.008(R99-3.20.0)	3.20.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R99-3.20.0)
TTC	TS-3GA-24.008(R99)v3.20.0	3.20.0	Published	Feb 06	http://www.ttc.or.jp/imt/ts/ts24008r99v3k0.pdf
Release 4					
ATIS	ATIS.3GPP.24.008V4170-2007	4.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.008	4.17.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 008	4.17.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v4h0
TTA	TTAT.3G-24.008(R4-4.17.0)	4.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R4-4.17.0)
TTC	TS-3GA-24.008(Rel4)v4.17.0	4.17.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24008rel4v4h0.pdf
Release 5					
ATIS	ATIS.3GPP.24.008V5160-2007	5.16.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.008	5.16.0	Published	Aug 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 008	5.16.0	Published	Aug 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v5g0
TTA	TTAT.3G-24.008(R5-5.16.0)	5.16.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R5-5.16.0)
TTC	TS-3GA-24.008(Rel5)v5.16.0	5.16.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts24008rel5v5g0.pdf
Release 6					
ATIS	ATIS.3GPP.24.008V6190-2008	6.19.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.008	6.19.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 008	6.19.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v6j0
TTA	TTAT.3G-24.008(R6-6.19.0)	6.19.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R6-6.19.0)
TTC	TS-3GA-24.008(Rel6)v6.19.0	6.19.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts24008rel6v6j0.pdf

Release 7

ATIS	ATIS.3GPP.24.008V7140-2009	7.14.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.008	7.14.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 008	7.14.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v7e0
TTA	TTAT.3G-24.008(R7-7.14.0)	7.14.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R7-7.14.0)
TTC	TS-3GA-24.008(Rel7)v7.14.0	7.14.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24008rel7v7e0.pdf

Release 8

ATIS	ATIS.3GPP.24.008V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.008	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 008	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124008v850
TTA	TTAT.3G-24.008(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.008(R8-8.5.0)
TTC	TS-3GA-24.008(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24008rel8v850.pdf

5.3.2.11.6 TS 24.011**Point-to-point short message service (SMS) support on mobile radio interface**

This specification describes the procedures used across the mobile radio interface by the signalling Layer 3 function short message control (SMC) and short message relay (SM-RL) function for both circuit-switched GSM and GPRS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.011V360-2002	3.6.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.011	3.6.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 011	3.6.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124011UR5
TTA	TTAE.3G-24.011(R99F)	3.6.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-24.011(R99F)
TTC	TS-3GA-24.011(R99)v3.6.0	3.6.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts24011r99v360.pdf
Release 4					
ATIS	T1.3GPP.24.011V411-2003	4.1.1	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.011	4.1.1	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 011	4.1.1	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124011v411
TTA	TTAT.3G-24.011(R4-4.1.1)	4.1.1	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R4-4.1.1)
TTC	TS-3GA-24.011(Rel4)v4.1.0	4.1.0	Published	May 02	http://www.ttc.or.jp/imt/ts/ts24011rel4v410.pdf
Release 5					
ATIS	T1.3GPP.24.011V520-2004	5.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.011	5.2.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 011	5.2.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0124011v520
TTA	TTAT.3G-24.011(R5-5.2.0)	5.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R5-5.2.0)
TTC	TS-3GA-24.011(Rel5)v5.2.0	5.2.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts24011rel5v520.pdf
Release 6					
ATIS	ATIS.3GPP.24.011V610-2006	6.1.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.011	6.1.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 011	6.1.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124011v610
TTA	TTAT.3G-24.011(R6-6.1.0)	6.1.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R6-6.1.0)
TTC	TS-3GA-24.011(Rel6)v6.1.0	6.1.0	Published	Jul 05	http://www.ttc.or.jp/imt/ts/ts24011rel6v610.pdf

Release 7

ATIS	ATIS.3GPP.24.011V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.011	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 011	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124011v700
TTA	TTAT.3G-24.011(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R7-7.0.0)
TTC	TS-3GA-24.011(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24011rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.24.011V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.011	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 011	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124011v810
TTA	TTAT.3G-24.011(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.011(R8-8.1.0)
TTC	TS-3GA-24.011(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24011rel8v810.pdf

5.3.2.11.7 TS 24.341**Support of SMS over IP networks; Stage 3**

This specification provides the protocol details for SMS over IP functionality within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP). The architecture for the SMS over IP functionality is specified in 3GPP TS 23.204.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.341V730-2009	7.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.341	7.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 341	7.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124341v730
TTA	TTAT.3G-24.341(R7-7.3.0)	7.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.341(R7-7.3.0)
TTC	TS-3GA-24.341(Rel7)v7.3.0	7.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24341rel7v730.pdf
Release 8					
ATIS	ATIS.3GPP.24.341V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.341	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 341	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124341v810
TTA	TTAT.3G-24.341(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.341(R8-8.1.0)
TTC	TS-3GA-24.341(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24341rel8v810.pdf

5.3.2.11.8 TS 23.060

General packet radio service (GPRS) service description – Stage 2

This specification describes a general overview over the GPRS architecture as well as a more detailed overview of the MS – CN protocol architecture. Details of the protocols will be specified in companion documents.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.060V3170-2007	3.17.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.060	3.17.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 060	3.17.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v3h0
TTA	TTAT.3G-23.060(R99-3.17.0)	3.17.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R99-3.17.0)
TTC	TS-3GA-23.060(R99)v3.17.0	3.17.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23060r99v3h0.pdf
Release 4					
ATIS	ATIS.3GPP.23.060V4110-2007	4.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.060	4.11.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 060	4.11.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v4b0
TTA	TTAT.3G-23.060(R4-4.11.0)	4.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R4-4.11.0)
TTC	TS-3GA-23.060(Rel4)v4.11.0	4.11.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23060rel4v4b0.pdf
Release 5					
ATIS	ATIS.3GPP.23.060V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.060	5.13.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 060	5.13.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v5d0
TTA	TTAT.3G-23.060(R5-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R5-5.13.0)
TTC	TS-3GA-23.060(Rel5)v5.13.0	5.13.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23060rel5v5d0.pdf
Release 6					
ATIS	ATIS.3GPP.23.060V6150-2007	6.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.060	6.15.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 060	6.15.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v6f0
TTA	TTAT.3G-23.060(R6-6.15.0)	6.15.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R6-6.15.0)
TTC	TS-3GA-23.060(Rel6)v6.15.0	6.15.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23060rel6v6f0.pdf
Release 7					
ATIS	ATIS.3GPP.23.060V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.060	7.8.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 060	7.8.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v780
TTA	TTAT.3G-23.060(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R7-7.8.0)
TTC	TS-3GA-23.060(Rel7)v7.8.0	7.8.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23060rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.23.060V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.060	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 060	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223060v840
TTA	TTAT.3G-23.060(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R8-8.4.0)
TTC	TS-3GA-23.060(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23060rel8v840.pdf

Release 9

TTA	TTAT.3G-23.060(R9-9.0.0)	9.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.060(R9-9.0.0)
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5.3.2.11.9 TS 24.022**Radio link protocol (RLP) for circuit switched bearer and teleservices**

This specification describes the RLP for data transmission over the UMTS public land mobile network (PLMN). RLP covers the Layer 2 functionality of the ISO OSI reference model (IS 7498). It is based on ideas contained in IS 3309, IS 4335 and IS 7809 (HDLC of ISO) as well as ITU-T Recommendations X.25, Q.921 and Q.922 (LAP-B and LAP-D, respectively). RLP has been tailored to the special needs of digital radio transmission. RLP provides to its users the OSI data link service (IS 8886).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.022V350-2004	3.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.022	3.5.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 022	3.5.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v350
TTA	TTAT.3G-24.022(R99-3.5.0)	3.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R99-3.5.0)
TTC	TS-3GA-24.022(R99)v3.5.0	3.5.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts24022r99v350.pdf
Release 4					
ATIS	T1.3GPP.24.022V410-2004	4.1.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.022	4.1.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 022	4.1.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v410
TTA	TTAT.3G-24.022(R4-4.1.0)	4.1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R4-4.1.0)
TTC	TS-3GA-24.022(Rel4)v4.1.0	4.1.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts24022rel4v410.pdf
Release 5					
ATIS	T1.3GPP.24.022V550-2004	5.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.022	5.5.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 022	5.5.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v550
TTA	TTAT.3G-24.022(R5-5.5.0)	5.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R5-5.5.0)
TTC	TS-3GA-24.022(Rel5)v5.5.0	5.5.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts24022rel5v550.pdf
Release 6					
ATIS	ATIS.3GPP.24.022V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.022	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 022	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0324022v600
TTA	TTAT.3G-24.022(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R6-6.0.0)
TTC	TS-3GA-24.022(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24022rel6v600.pdf
Release 7					
ATIS	ATIS.3GPP.24.022V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.022	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 022	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0324022v700
TTA	TTAT.3G-24.022(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R7-7.0.0)
TTC	TS-3GA-24.022(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24022rel7v700.pdf

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.24.022V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.022	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 022	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0324022v800
TTA	TTAT.3G-24.022(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.022(R8-8.0.0)
TTC	TS-3GA-24.022(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24022rel8v800.pdf

5.3.2.11.10 TS 24.010**Mobile radio interface Layer 3 – supplementary services specification – general aspects**

This specification describes the general aspects of the specification of supplementary services at the Layer 3 radio interface. Details are specified in other TS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.010V320-2002	3.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.010	3.2.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 010	3.2.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010UR2
TTA	TTAE.3G-24.010(R99-3.2.0)	3.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-24.010(R99-3.2.0)
TTC	TS-3GA-24.010(R99)v3.2.0	3.2.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts24010r99v320.pdf
Release 4					
ATIS	T1.3GPP.24.010V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.010	4.2.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 010	4.2.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010Uv4R2
TTA	TTAE.3G-24.010(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-24.010(R4-4.2.0)
TTC	TS-3GA-24.010(Rel4)v4.2.0	4.2.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts24010rel4v420.pdf
Release 5					
ATIS	T1.3GPP.24.010V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.010	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 010	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010v500
TTA	TTAT.3G-24.010(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R5-5.0.0)
TTC	TS-3GA-24.010(Rel5)v5.0.0	5.0.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts24010rel5v500.pdf
Release 6					
ATIS	ATIS.3GPP.24.010V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.010	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 010	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424010v600
TTA	TTAT.3G-24.010(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R6-6.0.0)
TTC	TS-3GA-24.010(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24010rel6v600.pdf
Release 7					
ATIS	ATIS.3GPP.24.010V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.010	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 010	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424010v700
TTA	TTAT.3G-24.010(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R7-7.0.0)
TTC	TS-3GA-24.010(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24010rel7v700.pdf

Release 8

ATIS	ATIS.3GPP.24.010V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.010	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 010	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424010v800
TTA	TTAT.3G-24.010(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.010(R8-8.0.0)
TTC	TS-3GA-24.010(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24010rel8v800.pdf

5.3.2.11.11 TS 24.080**Mobile radio interface Layer 3 – supplementary services specification – formats and coding**

This specification describes the coding of information necessary for support of supplementary service operation on the mobile radio interface L3. Details are specified in other TS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.080V371-2004	3.7.1	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.080	3.7.1	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 080	3.7.1	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424080v371
TTA	TTAT.3G-24.080(R99-3.7.1)	3.7.1	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R99-3.7.1)
TTC	TS-3GA-24.080(R99)v3.7.0	3.7.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts24080r99v370.pdf
Release 4					
ATIS	ATIS.3GPP.24.080V440-2005	4.4.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.080	4.4.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 080	4.4.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424080v440
TTA	TTAT.3G-24.080(R4-4.4.0)	4.4.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R4-4.4.0)
TTC	TS-3GA-24.080(Rel4)v4.4.0	4.4.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24080rel4v440.pdf
Release 5					
ATIS	ATIS.3GPP.24.080V550-2005	5.5.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.080	5.5.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 080	5.5.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGN-0424080v550
TTA	TTAT.3G-24.080(R5-5.5.0)	5.5.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R5-5.5.0)
TTC	TS-3GA-24.080(Rel5)v5.5.0	5.5.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts24080rel5v550.pdf
Release 6					
ATIS	ATIS.3GPP.24.080V630-2006	6.3.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.080	6.3.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 080	6.3.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424080v630
TTA	TTAT.3G-24.080(R6-6.3.0)	6.3.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R6-6.3.0)
TTC	TS-3GA-24.080(Rel6)v6.3.0	6.3.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts24080rel6v630.pdf
Release 7					
ATIS	ATIS.3GPP.24.080V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.080	7.4.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 080	7.4.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424080v740
TTA	TTAT.3G-24.080(R7-7.4.0)	7.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R7-7.4.0)
TTC	TS-3GA-24.080(Rel7)v7.4.0	7.4.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts24080rel7v740.pdf

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.24.080V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.080	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 080	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0424080v800
TTA	TTAT.3G-24.080(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.080(R8-8.0.0)
TTC	TS-3GA-24.080(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24080rel8v800.pdf

5.3.2.11.12 TS 24.173**IMS Multimedia telephony service and supplementary services; Stage 3**

This specification provides the protocol details for multimedia telephony communication service and associated supplementary services in the IP Multimedia (IM) Core Network (CN) subsystem based on the requirements from 3GPP TS 22.173. Multimedia telephony and supplementary services allow users to establish communications between them and enrich that by enabling supplementary services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.173V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.173	7.8.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 173	7.8.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124173v780
TTA	TTAT.3G-24.173(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.173(R7-7.8.0)
TTC	TS-3GA-24.173(Rel7)v7.8.0	7.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24173rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.24.173V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.173	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 173	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124173v840
TTA	TTAT.3G-24.173(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.173(R8-8.4.0)
TTC	TS-3GA-24.173(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24173rel8v840.pdf

5.3.2.11.13 TS 24.237**IP Multimedia Subsystem (IMS) Service Continuity; Stage 3**

This specification provides the capability of continuing ongoing communication sessions with multiple media across different access networks or across different user equipments (UEs) under the control of the same subscriber. The present document provides the protocol details for enabling IMS SC based on the Session Initiation protocol (SIP) and the Session Description Protocol (SDP) and the protocols of the 3GPP Circuit-Switched (CS) domain (e.g. CAP, MAP, ISUP, BICC and the NAS call control protocol for the CS access).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.237V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.237	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 237	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124237v810
TTA	TTAT.3G-24.237(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.237(R8-8.1.0)
TTC	TS-3GA-24.237(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24237rel8v810.pdf

5.3.2.11.14 TS TS 24.279**Combining Circuit Switched (CS) and IP Multimedia Subsystem (IMS) services; Stage 3**

This specification provides the technical realization for the combination of Circuit Switched calls and IM sessions when using them simultaneously between the same two users. It also describes the use of CS and IM services in combination, using the existing procedures that have been defined for CS and IMS. It includes the necessary function as adding an IM session to an ongoing CS call, adding a CS call to an ongoing IM session, supplementary services as they relate to CSICS and supporting capability exchange.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.279V770-2008	7.7.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.279	7.7.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 279	7.7.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124279v770
TTA	TTAT.3G-24.279(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.279(R7-7.7.0)
TTC	TS-3GA-24.279(Rel7)v7.7.0	7.7.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts24279rel7v770.pdf
Release 8					
ATIS	ATIS.3GPP.24.279V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.279	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 279	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124279v810
TTA	TTAT.3G-24.279(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.279(R8-8.1.0)
TTC	TS-3GA-24.279(Rel8)v8.1.0	8.1.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24279rel8v810.pdf

5.3.2.11.15 TS 24.229**IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3**

This specification defines a call control protocol for use in the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP), and the associated Session Description Protocol (SDP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.24.229V5220-2009	5.22.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.229	5.22.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 229	5.22.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v5m0
TTA	TTAT.3G-24.229(R5-5.22.0)	5.22.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R5-5.22.0)
TTC	TS-3GA-24.229(Rel5)v5.22.0	5.22.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24229rel5v5m0.pdf
Release 6					
ATIS	ATIS.3GPP.24.229V6210-2009	6.21.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.229	6.21.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 229	6.21.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v610
TTA	TTAT.3G-24.229(R6-6.21.0)	6.21.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R6-6.21.0)
TTC	TS-3GA-24.229(Rel6)v6.21.0	6.21.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24229rel6v610.pdf

Release 7

ATIS	ATIS.3GPP.24.229V7150-2009	7.15.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.229	7.15.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 229	7.15.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v7f0
TTA	TTAT.3G-24.229(R7-7.15.0)	7.15.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R7-7.15.0)
TTC	TS-3GA-24.229(Rel7)v7.15.0	7.15.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24229rel7v7f0.pdf

Release 8

ATIS	ATIS.3GPP.24.229V870-2009	8.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.229	8.7.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 229	8.7.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124229v870
TTA	TTAT.3G-24.229(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.229(R8-8.7.0)
TTC	TS-3GA-24.229(Rel8)v8.7.0	8.7.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24229rel8v870.pdf

5.3.2.11.16 TS 24.141**Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3**

This specification provides the protocol details for the presence service within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and SIP Events as defined in 3GPP TS 24.229.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.141V6110-2009	6.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.141	6.11.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 141	6.11.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124141v6b0
TTA	TTAT.3G-24.141(R6-6.11.0)	6.11.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.141(R6-6.11.0)
TTC	TS-3GA-24.141(Rel6)v6.11.0	6.11.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24141rel6v6b0.pdf
Release 7					
ATIS	ATIS.3GPP.24.141V760-2009	7.6.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.141	7.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 141	7.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124141v760
TTA	TTAT.3G-24.141(R7-7.6.0)	7.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.141(R7-7.6.0)
TTC	TS-3GA-24.141(Rel7)v7.6.0	7.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24141rel7v760.pdf
Release 8					
ATIS	ATIS.3GPP.24.141V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.141	8.3.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 141	8.3.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124141v830
TTA	TTAT.3G-24.141(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.141(R8-8.3.0)
TTC	TS-3GA-24.141(Rel8)v8.3.0	8.3.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24141rel8v830.pdf

5.3.2.11.17 TS 24.147**Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3**

This specification provides the protocol details for conferencing within the IP Multimedia Core Network subsystem (IMS) based on the Session Initiation Protocol (SIP), SIP Events, the Session Description Protocol (SDP) and the Binary Floor Control Protocol (BFCP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.147V690-2008	6.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.147	6.9.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 147	6.9.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124147v690
TTA	TTAT.3G-24.147(R6-6.9.0)	6.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.147(R6-6.9.0)
TTC	TS-3GA-24.147(Rel6)v6.9.0	6.9.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts24147rel6v690.pdf
Release 7					
ATIS	ATIS.3GPP.24.147V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.147	7.10.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 147	7.10.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124147v7a0
TTA	TTAT.3G-24.147(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.147(R7-7.10.0)
TTC	TS-3GA-24.147(Rel7)v7.10.0	7.10.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24147rel7v7a0.pdf
Release 8					
ATIS	ATIS.3GPP.24.147V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.147	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 147	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124147v820
TTA	TTAT.3G-24.147(R7-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.147(R7-8.2.0)
TTC	TS-3GA-24.147(Rel8)v8.2.0	8.2.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24147rel8v820.pdf

5.3.2.11.18 TS 24.247**Messaging service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3**

This specification provides the protocol details for the messaging service within the IP Multimedia CN Subsystem (IMS) based on the Session Initiation Protocol (SIP), the Session Description Protocol (SDP) and, the Message Session Relay Protocol (MSRP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.247V6100-2009	6.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.247	6.10.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 247	6.10.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124247v6a0
TTA	TTAT.3G-24.247(R6-6.10.0)	6.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.247(R6-6.10.0)
TTC	TS-3GA-24.247(Rel6)v6.10.0	6.10.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24247rel6v6a0.pdf

Release 7

ATIS	ATIS.3GPP.24.247V740-2009	7.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.247	7.4.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 247	7.4.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124247v740
TTA	TTAT.3G-24.247(R7-7.4.0)	7.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.247(R7-7.4.0)
TTC	TS-3GA-24.247(Rel7)v7.4.0	7.4.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24247rel7v740.pdf

Release 8

ATIS	ATIS.3GPP.24.247V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.247	8.2.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 247	8.2.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124247v820
TTA	TTAT.3G-24.247(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.247(R8-8.2.0)
TTC	TS-3GA-24.247(Rel8)v8.2.0	8.2.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24247rel8v820.pdf

5.3.2.11.19 TS 29.228**IP Multimedia (IM) Subsystem Cx and Dx interfaces; Signalling flows and message contents**

This 3GPP Technical Specification (TS) specifies the interactions between the HSS (Home Subscriber Server) and the CSCF (Call Session Control Functions), referred to as the Cx interface, and the interactions between the CSCF and the SLF (Server Locator Function), referred to as the Dx interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.228V5200-2007	5.20.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.228	5.20.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 228	5.20.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v5k0
TTC	TS-3GA-29.228(Rel5)v5.20.0	5.20.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29228rel5v5k0.pdf
Release 6					
ATIS	ATIS.3GPP.29.228V6150-2007	6.15.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.228	6.15.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 228	6.15.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v6f0
TTC	TS-3GA-29.228(Rel6)v6.15.0	6.15.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29228rel6v6f0.pdf
Release 7					
ATIS	ATIS.3GPP.29.228V7110-2009	7.11.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.228	7.11.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 228	7.11.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v7b0
TTC	TS-3GA-29.228(Rel7)v7.11.0	7.11.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29228rel7v7b0.pdf
Release 8					
ATIS	ATIS.3GPP.29.228V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.228	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 228	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429228v850
TTC	TS-3GA-29.228(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29228rel8v850.pdf

5.3.2.11.20 TS 29.229

Cx and Dx interfaces based on the Diameter protocol; Protocol details

This specification defines a transport protocol for use in the IP multimedia (IM) Core Network (CN) subsystem based on Diameter.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.229V5130-2007	5.13.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.229	5.13.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 229	5.13.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v5d0
TTA	TTAT.3G-29.229(R5-5.13.0)	5.13.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R5-5.13.0)
TTC	TS-3GA-29.229(Rel5)v5.13.0	5.13.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29229rel5v5d0.pdf
Release 6					
ATIS	ATIS.3GPP.29.229V6100-2007	6.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.229	6.10.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 229	6.10.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v6a0
TTA	TTAT.3G-29.229(R6-6.10.0)	6.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R6-6.10.0)
TTC	TS-3GA-29.229(Rel6)v6.10.0	6.10.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts29229rel6v6a0.pdf
Release 7					
ATIS	ATIS.3GPP.29.229V780-2009	7.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.229	7.8.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 229	7.8.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v780
TTA	TTAT.3G-29.229(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R7-7.8.0)
TTC	TS-3GA-29.229(Rel7)v7.8.0	7.8.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts29229rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.29.229V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.229	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 229	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429229v850
TTA	TTAT.3G-29.229(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.229(R8-8.7.0)
TTC	TS-3GA-29.229(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29229rel8v850.pdf

5.3.2.12 Terminal aspects

5.3.2.12.1 TS 21.111

USIM and IC card requirements

This specification describes the requirements of the USIM and the USIM IC card (UICC). These are derived from the service and security requirements defined in the respective specifications. The document is the basis for the detailed specification of the USIM and the UICC, and the interface to the terminal.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-21.111	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A21111-350.pdf
ATIS	ATIS.3GPP.21.111V350-2006	3.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.111	3.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 111	3.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v350
TTA	TTAT.3G-21.111(R99-3.5.0)	3.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-21.111	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A21111-420.pdf
ATIS	ATIS.3GPP.21.111V420-2006	4.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.111	4.2.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 111	4.2.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v420
TTA	TTAT.3G-21.111(R4-4.2.0)	4.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-21.111	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A21111-520.pdf
ATIS	ATIS.3GPP.21.111V520-2006	5.2.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.111	5.2.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 111	5.2.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v520
TTA	TTAT.3G-21.111(R5-5.2.0)	5.2.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R5-5.2.0)
Release 6					
ARIB	ARIB STD-T63-21.111	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A21111-630.pdf
ATIS	ATIS.3GPP.21.111V630-2007	6.3.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.111	6.3.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 111	6.3.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v630
TTA	TTAT.3G-21.111(R6-6.3.0)	6.3.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R6-6.3.0)
Release 7					
ARIB	ARIB STD-T63-21.111	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A21111-710.pdf
ATIS	ATIS.3GPP.21.111V710-2008	7.1.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.111	7.1.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 111	7.1.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v710
TTA	TTAT.3G-21.111(R7-7.1.0)	7.1.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R7-7.1.0)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-21.111	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A21111-820.pdf
ATIS	ATIS.3GPP.21.111V820-2008	8.2.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.111	8.2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 111	8.2.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0621111v820
TTA	TTAT.3G-21.111(R8-8.2.0)	8.2.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.111(R8-8.2.0)

5.3.2.12.2 TS 22.112**USAT-Interpreter – Stage 1**

This specification specifies a system to make Mobile Operator services, based on USAT functionality and USIM based security functionality, available to an internet environment. This is achieved by specifying the necessary components and protocols for a secure narrow band channel between the internet application and an USAT Interpreter on the USIM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-22.112	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22112-500.pdf
ATIS	T1.3GPP.22.112V500-2004	5.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-22.112	5.0.0	Published	Aug 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 112	5.0.0	Published	Aug 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0322112v500
TTA	TTAT.3G-22.112(R5-5.0.0)	5.0.0	Approved	May 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R5-5.0.0)
Release 6					
ARIB	ARIB STD-T63-22.112	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22112-600.pdf
ATIS	ATIS.3GPP.22.112V600-2006	6.0.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-22.112	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 112	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0322112v600
TTA	TTAT.3G-22.112(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-22.112	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22112-700.pdf
ATIS	ATIS.3GPP.22.112V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-22.112	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 112	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0622112v700
TTA	TTAT.3G-22.112(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-22.112	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22112-800.pdf
ATIS	ATIS.3GPP.22.112V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-22.112	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 112	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0622112v800
TTA	TTAT.3G-22.112(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.112(R8-8.0.0)

5.3.2.12.3 TS 31.101

UICC-Terminal Interface; Physical and Logical Characteristics

This specification specifies the interface between the UICC and the Terminal for 3G telecom network operation. This includes the requirements for the physical characteristics of the UICC, the electrical interface between the UICC and the Terminal, the initial communication establishment and the transport protocols, the communication commands and the procedures and the application independent files and protocols.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.101	3.3.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31101-331.pdf
ATIS	ATIS.3GPP.31.101V331-2006	3.3.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.101	3.3.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 101	3.3.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331101v331
TTA	TTAE.3G-31.101(R99-3.3.1)	3.3.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-31.101(R99-3.3.1)
Release 4					
ARIB	ARIB STD-T63-31.101	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31101-421.pdf
ATIS	ATIS.3GPP.31.101V421-2006	4.2.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.101	4.2.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 101	4.2.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331101v421
TTA	TTAT.3G-31.101(R4-4.2.1)	4.2.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R4-4.2.1)
Release 5					
ARIB	ARIB STD-T63-31.101	5.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31101-521.pdf
ATIS	ATIS.3GPP.31.101V521-2006	5.2.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.101	5.2.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 101	5.2.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331101v521
TTA	TTAT.3G-31.101(R5-5.2.1)	5.2.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R5-5.2.1)
Release 6					
ARIB	ARIB STD-T63-31.101	6.5.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31101-651.pdf
ATIS	ATIS.3GPP.31.101V651-2007	6.5.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.101	6.5.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 101	6.5.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631101v651
TTA	TTAT.3G-31.101(R6-6.5.1)	6.5.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R6-6.5.1)
Release 7					
ARIB	ARIB STD-T63-31.101	7.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31101-701.pdf
ATIS	ATIS.3GPP.31.101V701-2007	7.0.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.101	7.0.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 101	7.0.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631101v701
TTA	TTAT.3G-31.101(R7-7.0.1)	7.0.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R7-7.0.1)

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-31.101	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31101-800.pdf
ATIS	ATIS.3GPP.31.101V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.101	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 101	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631101v800
TTA	TTAT.3G-31.101(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.101(R8-8.0.0)

5.3.2.12.4 TS 31.102**Characteristics of the USIM Application**

This specification defines the USIM application for 3G telecom network operation. This specification specifies, command parameters, file structures and content, security functions and the application protocol to be used on the interface between UICC (USIM) and ME.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.102	3.18.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31102-3i0.pdf
ATIS	ATIS.3GPP.31.102V3180-2006	3.18.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.102	3.18.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 102	3.18.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v3i0
TTA	TTAT.3G-31.102(R99-3.18.0)	3.18.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R99-3.18.0)
Release 4					
ARIB	ARIB STD-T63-31.102	4.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31102-4f0.pdf
ATIS	ATIS.3GPP.31.102V4150-2006	4.15.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.102	4.15.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 102	4.15.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v4f0
TTA	TTAT.3G-31.102(R4-4.15.0)	4.15.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R4-4.15.0)
Release 5					
ARIB	ARIB STD-T63-31.102	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31102-5e0.pdf
ATIS	ATIS.3GPP.31.102V5140-2006	5.14.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.102	5.14.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 102	5.14.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v5e0
TTA	TTAT.3G-31.102(R5-5.14.0)	5.14.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R5-5.14.0)
Release 6					
ARIB	ARIB STD-T63-31.102	6.21.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31102-6i0.pdf
ATIS	ATIS.3GPP.31.102V6210-2009	6.21.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.102	6.21.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 102	6.21.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v6i0
TTA	TTAT.3G-31.102(R6-6.21.0)	6.21.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R6-6.21.0)
Release 7					
ARIB	ARIB STD-T63-31.102	7.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31102-7d0.pdf
ATIS	ATIS.3GPP.31.102V7130-2009	7.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.102	7.13.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 102	7.13.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v7d0
TTA	TTAT.3G-31.102(R7-7.13.0)	7.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R7-7.13.0)

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SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ARIB	ARIB STD-T63-31.102	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31102-850.pdf
ATIS	ATIS.3GPP.31.102V850-2009	8.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.102	8.5.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 102	8.5.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631102v850
TTA	TTAT.3G-31.102(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.102(R8-8.5.0)

5.3.2.12.5 TS 31.103**Characteristics of the ISIM Application**

This specification defines the ISIM application for 3G telecom network operation. This specification specifies command parameters, file structures and content, security functions and the application protocol to be used on the interface between UICC (ISIM) and ME.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-31.103	5.13.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31103-5d1.pdf
ATIS	ATIS.3GPP.31.103V5131-2007	5.13.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.103	5.13.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 103	5.13.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v5d1
TTA	TTAT.3G-31.103(R5-5.13.1)	5.13.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R5-5.13.1)
Release 6					
ARIB	ARIB STD-T63-31.103	6.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31103-6d0.pdf
ATIS	ATIS.3GPP.31.103V6130-2009	6.13.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.103	6.13.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 103	6.13.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v6d0
TTA	TTAT.3G-31.103(R6-6.13.0)	6.13.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R6-6.13.0)
Release 7					
ARIB	ARIB STD-T63-31.103	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31103-740.pdf
ATIS	ATIS.3GPP.31.103V740-2009	7.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.103	7.4.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 103	7.4.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v740
TTA	TTAT.3G-31.103(R7-7.4.0)	7.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R7-7.4.0)
Release 8					
ARIB	ARIB STD-T63-31.103	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31103-800.pdf
ATIS	ATIS.3GPP.31.103V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.103	8.0.1	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 103	8.0.1	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631103v801
TTA	TTAT.3G-31.103(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.103(R8-8.0.1)

5.3.2.12.6 TS 31.133**ISIM Application Programming Interface (API)**

This specification defines the ISIM Application Programming Interface extending the “UICC API for Java Card™”. This API allows to develop an application running together with a ISIM application. The present document includes information applicable to network operators, service providers, server, ISIM and database manufacturers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ARIB	ARIB STD-T63-31.133	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31133-720.pdf
CCSA	CCSA-TSD-TDD-31.133	7.2.2	Published	Nov 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 133	7.2.2	Published	Nov 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631133v722
TTA	TTAT.3G-31.133(R7-7.2.2)	7.2.2	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.133(R7-7.2.2)
Release 8					
ARIB	ARIB STD-T63-31.133	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31133-800.pdf
ATIS	ATIS.3GPP.31.133V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.133	8.0.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 133	8.0.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631133v800
TTA	TTAT.3G-31.133(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.133(R8-8.0.0)

5.3.2.12.7 TS 31.110**Numbering system for telecommunication IC card applications**

This specification describes the numbering system for Application IDentifiers (AID) for 3G telecommunication Integrated Circuits (IC) card applications. The numbering system provides a means for an application and related services offered by a provider to identify if a given card contains the elements required by its application and related services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.110	3.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31110-320.pdf
ATIS	T1.3GPP.31.110V320-2002	3.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.110	3.2.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 110	3.2.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331110UR2
TTA	TTAE.3G-31.110(R99)	3.2.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-31.110(R99)
Release 4					
ARIB	ARIB STD-T63-31.110	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31110-410.pdf
ATIS	T1.3GPP.31.110V410-2002	4.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.110	4.1.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 110	4.1.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331110Uv4R1
TTA	TTAE.3G-31.110(R4-4.1.0)	4.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-31.110(R4-4.1.0)

5.3.2.12.8 TS 31.111

USIM application toolkit (USAT)

This specification defines the interface between the UICC and the Mobile Equipment (ME), and mandatory ME procedures, specifically for “USIM Application Toolkit”. USAT is a set of commands and procedures for use during the network operation phase of 3G, in addition to those defined in TS 31.101.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.111	3.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31111-3e0.pdf
ATIS	ATIS.3GPP.31.111V3140-2007	3.14.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.111	3.14.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 111	3.14.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v3e0
TTA	TTAT.3G-31.111(R99-3.14.0)	3.14.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R99-3.14.0)
Release 4					
ARIB	ARIB STD-T63-31.111	4.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31111-4g0.pdf
ATIS	ATIS.3GPP.31.111V4160-2007	4.16.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.111	4.16.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 111	4.16.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v4g0
TTA	TTAT.3G-31.111(R4-4.16.0)	4.16.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R4-4.16.0)
Release 5					
ARIB	ARIB STD-T63-31.111	5.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31111-5b0.pdf
ATIS	ATIS.3GPP.31.111V5110-2007	5.11.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.111	5.11.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 111	5.11.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v5b0
TTA	TTAT.3G-31.111(R5-5.11.0)	5.11.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R5-5.11.0)
Release 6					
ARIB	ARIB STD-T63-31.111	6.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31111-6c0.pdf
ATIS	ATIS.3GPP.31.111V6120-2009	6.12.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.111	6.12.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 111	6.12.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v6c0
TTA	TTAT.3G-31.111(R6-6.12.0)	6.12.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R6-6.12.0)
Release 7					
ARIB	ARIB STD-T63-31.111	7.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31111-7a0.pdf
ATIS	ATIS.3GPP.31.111V7100-2009	7.10.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.111	7.10.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 111	7.10.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v7a0
TTA	TTAT.3G-31.111(R7-7.10.0)	7.10.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R7-7.10.0)
Release 8					
ARIB	ARIB STD-T63-31.111	8.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31111-850.pdf
ATIS	ATIS.3GPP.31.111V851-2009	8.5.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.111	8.5.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 111	8.5.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631111v851
TTA	TTAT.3G-31.111(R8-8.5.1)	8.5.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.111(R8-8.5.1)

5.3.2.12.9 TS 31.112

USIM Application Toolkit (USAT) interpreter architecture

This specification defines the overall architecture for the USAT Interpreter system including the role models, system architecture and information flow.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-31.112	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31112-520.pdf
ATIS	T1.3GPP.31.112V520-2003	5.2.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.112	5.2.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 112	5.2.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331112v520
TTA	TTAT.3G-31.112(R5-5.2.0)	5.2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R5-5.2.0)
Release 6					
ARIB	ARIB STD-T63-31.112	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31112-600.pdf
ATIS	ATIS.3GPP.31.112V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.112	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 112	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331112v600
TTA	TTAT.3G-31.112(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R6-6.0.0)
Release 7					
ARIB	ARIB STD-T63-31.112	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31112-700.pdf
ATIS	ATIS.3GPP.31.112V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.112	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 112	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631112v700
TTA	TTAT.3G-31.112(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.112	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31112-800.pdf
ATIS	ATIS.3GPP.31.112V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.112	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 112	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631112v800
TTA	TTAT.3G-31.112(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.112(R8-8.0.0)

5.3.2.12.10 TS 31.113

USAT Interpreter Byte Codes

This specification specifies the byte codes that are recognized by an USAT Interpreter. The primary purpose of the byte codes is to provide efficient programmatic access to the SIM Application Toolkit commands.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-31.113	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31113-560.pdf
ATIS	ATIS.3GPP.31.113V560-2005	5.6.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.113	5.6.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 113	5.6.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331113v560
TTA	TTAT.3G-31.113(R5-5.6.0)	5.6.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R5-5.6.0)
Release 6					
ARIB	ARIB STD-T63-31.113	6.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31113-630.pdf
ATIS	ATIS.3GPP.31.113V630-2005	6.3.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.113	6.3.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 113	6.3.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331113v630
TTA	TTAT.3G-31.113(R6-6.3.0)	6.3.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R6-6.3.0)
Release 7					
ARIB	ARIB STD-T63-31.113	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31113-700.pdf
ATIS	ATIS.3GPP.31.113V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.113	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 113	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631113v700
TTA	TTAT.3G-31.113(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.113	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31113-800.pdf
ATIS	ATIS.3GPP.31.113V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.113	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 113	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631113v800
TTA	TTAT.3G-31.113(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.113(R8-8.0.0)

5.3.2.12.11 TS 31.220**Contact Manager for 3GPP UICC applications – external interface aspects**

This specification defines the Contact Manager for 3GPP UICC applications based on OMA DS, also specifies the external interface between the Contact Manager Server in the UICC and the Contact Manager External Client in the ME.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-31.220	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31220-800.pdf
CCSA	CCSA-TSD-TDD-31.220	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 220	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGC-0631220v800
TTA	TTAT.3G-31.220(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.220(R8-8.0.0)

5.3.2.12.12 TS 31.115**Secured packet structure for (U)SIM Toolkit applications**

This specification specifies the structure of the Secured Packets in implementations using Short Message Service and Cell Broadcast Service. It is applicable to the exchange of secured packets between an entity in a 3G or GSM PLMN and an entity in the (U)SIM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-31.115	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31115-650.pdf
ATIS	ATIS.3GPP.31.115V650-2006	6.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.115	6.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 115	6.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631115v650
TTA	TTAT.3G-31.115(R6-6.5.0)	6.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.115(R6-6.5.0)
Release 7					
ARIB	ARIB STD-T63-31.115	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31115-710.pdf
ATIS	ATIS.3GPP.31.115V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.115	7.1.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 115	7.1.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631115v710
TTA	TTAT.3G-31.115(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.115(R7-7.1.0)
Release 8					
ARIB	ARIB STD-T63-31.115	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31115-800.pdf
ATIS	ATIS.3GPP.31.115V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.115	8.0.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 115	8.0.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631115v801
TTA	TTAT.3G-31.115(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.115(R8-8.0.1)

5.3.2.12.13 TS 31.116

Remote APDU Structure for (U)SIM Toolkit applications

This specification defines the remote management of files and applets on the SIM/USIM.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-31.116	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31116-680.pdf
ATIS	ATIS.3GPP.31.116V680-2006	6.8.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.116	6.8.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 116	6.8.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631116v680
TTA	TTAT.3G-31.116(R6-6.8.0)	6.8.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.116(R6-6.8.0)
Release 7					
ARIB	ARIB STD-T63-31.116	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31116-700.pdf
ATIS	ATIS.3GPP.31.116V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.116	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 116	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631116v700
TTA	TTAT.3G-31.116(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.116(R7-7.0.0)
Release 8					
ARIB	ARIB STD-T63-31.116	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31116-800.pdf
ATIS	ATIS.3GPP.31.116V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.116	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 116	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631116v800
TTA	TTAT.3G-31.116(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.116(R8-8.0.0)

5.3.2.12.14 TS 31.120

Physical, Electrical and Logical Test Specification

This specification tests the physical, electrical and logical requirements as specified in TS 31.101.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.120	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31120-310.pdf
ATIS	ATIS.3GPP.31.120V310-2005	3.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.120	3.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 120	3.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v310
TTA	TTAT.3G-31.120(R99-3.1.0)	3.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R99-3.1.0)
Release 4					
ARIB	ARIB STD-T63-31.120	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31120-400.pdf
ATIS	ATIS.3GPP.31.120V400-2006	4.0.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.120	4.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 120	4.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v400
TTA	TTAT.3G-31.120(R4-4.0.0)	4.0.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R4-4.0.0)

Release 5

ARIB	ARIB STD-T63-31.120	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31120-500.pdf
ATIS	ATIS.3GPP.31.120V500-2006	5.0.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.120	5.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 120	5.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v500
TTA	TTAT.3G-31.120(R5-5.0.0)	5.0.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-31.120	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31120-600.pdf
ATIS	ATIS.3GPP.31.120V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.120	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 120	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0331120v600
TTA	TTAT.3G-31.120(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-31.120	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31120-700.pdf
ATIS	ATIS.3GPP.31.120V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.120	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 120	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631120v700
TTA	TTAT.3G-31.120(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-31.120	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31120-800.pdf
ATIS	ATIS.3GPP.31.120V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.120	8.0.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 120	8.0.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631120v800
TTA	TTAT.3G-31.120(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.120(R8-8.0.0)

5.3.2.12.15 TS 31.121**UICC-Terminal Interface; USIM Application Test specification**

This specification provides the UICC-Terminal Interface Conformance Test Specification between the 3G Terminal and USIM (Universal Subscriber Identity Module) as an application on the UICC and the Terminal for 3G telecom network operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.121	3.15.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31121-3fl.pdf
ATIS	ATIS.3GPP.31.121V3151-2006	3.15.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.121	3.15.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 121	3.15.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v3fl
TTA	TTAT.3G-31.121(R99-3.15.1)	3.15.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R99-3.15.1)
Release 4					
ARIB	ARIB STD-T63-31.121	4.14.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31121-4e1.pdf
ATIS	ATIS.3GPP.31.121V4141-2006	4.14.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.121	4.14.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 121	4.14.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v4e1
TTA	TTAT.3G-31.121(R4-4.14.1)	4.14.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R4-4.14.1)

Release 5

ARIB	ARIB STD-T63-31.121	5.4.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31121-541.pdf
ATIS	ATIS.3GPP.31.121V541-2006	5.4.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.121	5.4.1	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 121	5.4.1	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v541
TTA	TTAT.3G-31.121(R5-5.4.1)	5.4.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R5-5.4.1)

Release 6

ARIB	ARIB STD-T63-31.121	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31121-680.pdf
ATIS	ATIS.3GPP.31.121V680-2007	6.8.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.121	6.8.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 121	6.8.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v680
TTA	TTAT.3G-31.121(R6-6.8.0)	6.8.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R6-6.8.0)

Release 7

ARIB	ARIB STD-T63-31.121	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31121-750.pdf
ATIS	ATIS.3GPP.31.121V750-2009	7.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.121	7.5.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 121	7.5.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v750
TTA	TTAT.3G-31.121(R7-7.5.0)	7.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R7-7.5.0)

Release 8

ATIS	ATIS.3GPP.31.121V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.121	8.0.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 121	8.0.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631121v800
TTA	TTAT.3G-31.121(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.121(R8-8.0.0)

5.3.2.12.16 TS 31.122**USIM Conformance Test Specification**

This specification provides the Conformance Test Specification for a UICC defined in TS 31.101 with Universal Subscriber Identity Module (USIM) defined in 3G TS 31.102.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-31.122	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A31122-3a0.pdf
ATIS	ATIS.3GPP.31.122V3100-2007	3.10.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.122	3.10.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 122	3.10.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v3a0
TTA	TTAT.3G-31.122(R99-3.10.0)	3.10.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R99-3.10.0)
Release 4					
ARIB	ARIB STD-T63-31.122	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A31122-421.pdf
ATIS	ATIS.3GPP.31.122V421-2007	4.2.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.122	4.2.1	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 122	4.2.1	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v421
TTA	TTAT.3G-31.122(R4-4.2.1)	4.2.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R4-4.2.1)

Release 5

ARIB	ARIB STD-T63-31.122	5.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A31122-501.pdf
ATIS	ATIS.3GPP.31.122V501-2007	5.0.1	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.122	5.0.1	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 122	5.0.1	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v501
TTA	TTAT.3G-31.122(R5-5.0.1)	5.0.1	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R5-5.0.1)

Release 6

ARIB	ARIB STD-T63-31.122	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31122-650.pdf
ATIS	ATIS.3GPP.31.122V650-2007	6.5.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.122	6.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 122	6.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v650
TTA	TTAT.3G-31.122(R6-6.5.0)	6.5.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R6-6.5.0)

Release 7

ARIB	ARIB STD-T63-31.122	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31122-710.pdf
ATIS	ATIS.3GPP.31.122V710-2007	7.1.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.122	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 122	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v710
TTA	TTAT.3G-31.122(R7-7.1.0)	7.1.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R7-7.1.0)

Release 8

ATIS	ATIS.3GPP.31.122V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.122	8.0.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 122	8.0.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631122v801
TTA	TTAT.3G-31.122(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.122(R8-8.0.1)

5.3.2.12.17 TS 31.130**(U)SIM API for Java Card**

This specification defines the (U)SIM Application Programming Interface extending the “UICC API for Java Card™”. This API allows to develop a (U)SAT application running together with a (U)SIM application and using GSM/3G network features.

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Release 6					
ARIB	ARIB STD-T63-31.130	6.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31130-660.pdf
ATIS	ATIS.3GPP.31.130V660-2007	6.6.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.130	6.6.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 130	6.6.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631130v660
TTA	TTAT.3G-31.130(R6-6.6.0)	6.6.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.130(R6-6.6.0)
Release 7					
ARIB	ARIB STD-T63-31.130	7.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31130-770.pdf
ATIS	ATIS.3GPP.31.130V771-2008	7.7.1	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.130	7.7.1	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 130	7.7.1	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631130v771
TTA	TTAT.3G-31.130(R7-7.7.0)	7.7.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.130(R7-7.7.0)

Release 8

ARIB	ARIB STD-T63-31.130	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A31130-810.pdf
ATIS	ATIS.3GPP.31.130V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.130	8.1.0	Awaiting		http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 130	8.1.0	Published	Jul 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631130v810

5.3.2.12.18 TS 31.131**‘C’ Language Binding to USIM API**

This specification includes information applicable to (U)SIM toolkit application developers creating applications using the C programming language ISO/IEC 9899. This specification describes an interface between toolkit applications written in the C programming language and the (U)SIM in order to realize the co-operation set forth in TS 42.019. In particular, the API described herein provides the service of assembling proactive commands and disassembling the responses to these commands for the application programmer.

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Release 6					
ARIB	ARIB STD-T63-31.131	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A31131-610.pdf
ATIS	T1.3GPP.31.131V610-2004	6.1.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.131	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 131	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0331131v610
TTA	TTAT.3G-31.131(R6-6.1.0)	6.1.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.131(R6-6.1.0)
Release 7					
ARIB	ARIB STD-T63-31.131	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A31131-700.pdf
ATIS	ATIS.3GPP.31.131V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.131	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 131	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631131v700
TTA	TTAT.3G-31.131(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.131(R7-7.0.0)
Release 8					
ATIS	ATIS.3GPP.31.131V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-31.131	8.0.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 131 131	8.0.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0631131v800
TTA	TTAT.3G-31.131(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-31.131(R8-8.0.0)

5.3.2.12.19 TS 34.131**Test Specification for ‘C’-language binding to (U)SIM API**

This specification covers the minimum characteristics considered necessary in order to provide compliance to 3GPP TS 31.131 “‘C’-language binding to (U)SIM API”.

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Release 6					
ARIB	ARIB STD-T63-34.131	6.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A34131-601.pdf
ATIS	ATIS.3GPP.34.131V601-2006	6.0.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.131	6.0.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 131	6.0.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0334131v601
TTA	TTAT.3G-34.131(R6-6.0.1)	6.0.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.131(R6-6.0.1)
Release 7					
ARIB	ARIB STD-T63-34.131	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A34131-700.pdf
ATIS	ATIS.3GPP.34.131V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.131	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 131	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0634131v700
TTA	TTAT.3G-34.131(R7-7.0.0)	7.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.131(R7-7.0.0)
Release 8					
ATIS	ATIS.3GPP.34.131V801-2009	8.0.1	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-34.131	8.0.1	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 134 131	8.0.1	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0634131v801
TTA	TTAT.3G-34.131(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-34.131(R8-8.0.1)

5.3.2.12.20 TS 22.048**Security mechanisms for (U)SIM application toolkit – Stage 1**

This specification provides standardized security mechanisms in conjunction with the SIM Application Toolkit for the interface between a 3G or GSM PLMN Entity and a UICC at the functional level.

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Release 4					
ARIB	ARIB STD-T63-22.048	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22048-400.pdf
ATIS	T1.3GPP.22.048V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-22.048	4.0.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 048	4.0.0	Published	Jul 01	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0322048Uv4
TTA	TTAE.3G-22.048(R4)	4.0.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-22.048(R4)
Release 5					
ATIS	T1.3GPP.22.048V500-2004	5.0.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-22.048	5.0.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 048	5.0.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0322048v500
TTA	TTAT.3G-22.048(R5-5.0.0)	5.0.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.048(R5-5.0.0)

5.3.2.12.21 TS 23.048**Security mechanisms for (U)SIM application toolkit – Stage 2**

This specification specifies the structure of the Secured Packets in a general format and in implementations using Short Message Service Point to Point (SMS-PP) and Short Message Service Cell Broadcast (SMS-CB).

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Release 4					
ARIB	ARIB STD-T63-23.048	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23048-450.pdf
ATIS	ATIS.3GPP.23.048V450-2006	4.5.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.048	4.5.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 048	4.5.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0623048v450
TTA	TTAT.3G-23.048(R4-4.5.0)	4.5.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.048(R4-4.5.0)
Release 5					
ARIB	ARIB STD-T63-23.048	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23048-590.pdf
ATIS	ATIS.3GPP.23.048V590-2006	5.9.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.048	5.9.0	Published	Jun 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 048	5.9.0	Published	Jun 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0623048v590
TTA	TTAT.3G-23.048(R5-5.9.0)	5.9.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.048(R5-5.9.0)

5.3.2.12.22 TS 23.038**Alphabets and language specific information**

This specification describes the language specific requirements for the terminals including character coding.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.038	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23038-330.pdf
ATIS	T1.3GPP.23.038V330-2002	3.3.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.038	3.3.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 038	3.3.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0223038U
TTA	TTAE.3G-23.038(R99)	3.3.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.038(R99)
Release 4					
ARIB	ARIB STD-T63-23.038	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23038-450.pdf
ATIS	ATIS.3GPP.23.038V450-2005	4.5.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.038	4.5.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 038	4.5.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223038v450
TTA	TTAT.3G-23.038(R4-4.5.0)	4.5.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R4-4.5.0)

Release 5

ARIB	ARIB STD-T63-23.038	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23038-510.pdf
ATIS	ATIS.3GPP.23.038V510-2005	5.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.038	5.1.0	Published	Oct 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 038	5.1.0	Published	Oct 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223038v510
TTA	TTAT.3G-23.038(R5-5.1.0)	5.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R5-5.1.0)

Release 6

ARIB	ARIB STD-T63-23.038	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23038-610.pdf
ATIS	ATIS.3GPP.23.038V610-2005	6.1.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.038	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 038	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223038v610
TTA	TTAT.3G-23.038(R6-6.1.0)	6.1.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R6-6.1.0)

Release 7

ARIB	ARIB STD-T63-23.038	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23038-700.pdf
ATIS	ATIS.3GPP.23.038V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.038	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 038	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123038v700
TTA	TTAT.3G-23.038(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.038	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23038-820.pdf
ATIS	ATIS.3GPP.23.038V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.038	8.2.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 038	8.2.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123038v820
TTA	TTAT.3G-23.038(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.038(R8-8.2.0)

5.3.2.12.23 TS 23.040**Technical realization of SMS point-to-point**

This specification describes the point-to-point SMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.040	3.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23040-3b0.pdf
ATIS	ATIS.3GPP.23.040V3110-2008	3.11.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.040	3.11.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 040	3.11.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v3b0
TTA	TTAT.3G-23.040(R99-3.11.0)	3.11.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R99-3.11.0)
Release 4					
ARIB	ARIB STD-T63-23.040	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23040-4a0.pdf
ATIS	ATIS.3GPP.23.040V4100-2008	4.10.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.040	4.10.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 040	4.10.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v4a0
TTA	TTAT.3G-23.040(R4-4.10.0)	4.10.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R4-4.10.0)

Release 5

ARIB	ARIB STD-T63-23.040	5.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23040-590.pdf
ATIS	ATIS.3GPP.23.040V590-2008	5.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.040	5.9.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 040	5.9.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v590
TTA	TTAT.3G-23.040(R5-5.9.0)	5.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R5-5.9.0)

Release 6

ARIB	ARIB STD-T63-23.040	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23040-690.pdf
ATIS	ATIS.3GPP.23.040V690-2008	6.9.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.040	6.9.0	Published	Jun 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 040	6.9.0	Published	Jun 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v690
TTA	TTAT.3G-23.040(R6-6.9.0)	6.9.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-23.040	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23040-720.pdf
ATIS	ATIS.3GPP.23.040V720-2009	7.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.040	7.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 040	7.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v720
TTA	TTAT.3G-23.040(R7-7.2.0)	7.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R7-7.2.0)

Release 8

ARIB	ARIB STD-T63-23.040	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23040-840.pdf
ATIS	ATIS.3GPP.23.040V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.040	8.4.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 040	8.4.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123040v840
TTA	TTAT.3G-23.040(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.040(R8-8.4.0)

5.3.2.12.24 TS 23.041**Technical realization of cell broadcast service (CBS)**

This specification describes the point-to-multipoint CBS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.041	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23041-350.pdf
ATIS	T1.3GPP.23.041V350-2003	3.5.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.041	3.5.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 041	3.5.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v350
TTA	TTAT.3G-23.041(R99-3.5.0)	3.5.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R99-3.5.0)
Release 4					
ARIB	ARIB STD-T63-23.041	4.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23041-440.pdf
ATIS	T1.3GPP.23.041V440-2004	4.4.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.041	4.4.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 041	4.4.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v440
TTA	TTAT.3G-23.041(R4-4.4.0)	4.4.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R4-4.4.0)

Release 5

ARIB	ARIB STD-T63-23.041	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23041-520.pdf
ATIS	T1.3GPP.23.041V520-2004	5.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.041	5.2.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 041	5.2.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v520
TTA	TTAT.3G-23.041(R5-5.2.0)	5.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R5-5.2.0)

Release 6

ARIB	ARIB STD-T63-23.041	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23041-620.pdf
ATIS	T1.3GPP.23.041V620-2004	6.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.041	6.2.0	Published	May 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 041	6.2.0	Published	May 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223041v620
TTA	TTAT.3G-23.041(R6-6.2.0)	6.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-23.041	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23041-700.pdf
ATIS	ATIS.3GPP.23.041V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.041	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 041	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123041v700
TTA	TTAT.3G-23.041(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.041	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23041-820.pdf
ATIS	ATIS.3GPP.23.041V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.041	8.2.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 041	8.2.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123041v820
TTA	TTAT.3G-23.041(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.041(R8-8.2.0)

5.3.2.12.25 TS 23.042**Compression algorithm for text messaging services**

This specification describes the compression algorithm for text messaging services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.042	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23042-310.pdf
ATIS	T1.3GPP.23.042V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.042	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 042	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGT-0223042U
TTA	TTAE.3G-23.042(F)	3.1.0	Approved	Mar 00	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.042(F)
Release 4					
ARIB	ARIB STD-T63-23.042	4.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23042-401.zip
ATIS	T1.3GPP.23.042V401-2002	4.0.1	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.042	4.0.1	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 042	4.0.1	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223042Uv4R1
TTA	TTAE.3G-23.042(R4-4.0.1)	4.0.1	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.042(R4-4.0.1)

Release 5

ARIB	ARIB STD-T63-23.042	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23042-500.pdf
ATIS	T1.3GPP.23.042V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.042	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 042	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223042v500
TTA	TTAT.3G-23.042(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-23.042	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23042-600.pdf
ATIS	ATIS.3GPP.23.042V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.042	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 042	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223042v600
TTA	TTAT.3G-23.042(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-23.042	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23042-700.pdf
ATIS	ATIS.3GPP.23.042V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.042	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 042	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123042v700
TTA	TTAT.3G-23.042(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.042	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23042-800.pdf
ATIS	ATIS.3GPP.23.042V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.042	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 042	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0123042v800
TTA	TTAT.3G-23.042(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.042(R8-8.0.0)

5.3.2.12.26 TS 23.057**Mobile Execution Environment (MEExE) – Stage 2**

This TS describes the functional capabilities and the security architecture of the Mobile Execution Environment.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.057	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23057-340.pdf
ATIS	T1.3GPP.23.057V340-2002	3.4.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.057	3.4.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 057	3.4.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057UR4
TTA	TTAE.3G-23.057(R99)	3.4.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.057(R99)
Release 4					
ARIB	ARIB STD-T63-23.057	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23057-450.pdf
ATIS	T1.3GPP.23.057V450-2002	4.5.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.057	4.5.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 057	4.5.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057Uv4R4
TTA	TTAE.3G-23.057(R4-4.5.0)	4.5.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.057(R4-4.5.0)

Release 5

ARIB	ARIB STD-T63-23.057	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23057-510.pdf
ATIS	T1.3GPP.23.057V510-2003	5.1.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.057	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 057	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057v510
TTA	TTAT.3G-23.057(R5-5.1.0)	5.1.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R5-5.1.0)

Release 6

ARIB	ARIB STD-T63-23.057	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23057-620.pdf
ATIS	T1.3GPP.23.057V620-2004	6.2.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.057	6.2.0	Published	May 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 057	6.2.0	Published	May 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223057v620
TTA	TTAT.3G-23.057(R6-6.2.0)	6.2.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R6-6.2.0)

Release 7

ARIB	ARIB STD-T63-23.057	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23057-700.pdf
ATIS	ATIS.3GPP.23.057V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.057	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 057	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223057v700
TTA	TTAT.3G-23.057(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-23.057	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23057-800.pdf
ATIS	ATIS.3GPP.23.057V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.057	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 057	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223057v800
TTA	TTAT.3G-23.057(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.057(R8-8.0.0)

5.3.2.12.27 TS 27.005**Use of data terminal equipment – data circuit terminating equipment (DTE – DCE) interface for cell broadcast service (CBS)**

This specification describes three interface protocols for control of SMS functions within a GSM mobile telephone from a remote terminal via an asynchronous interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.005	3.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27005-320.pdf
ATIS	T1.3GPP.27.005V320-2003	3.2.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.005	3.2.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 005	3.2.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v320
TTA	TTAT.3G-27.005(R99-3.2.0)	3.2.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R99-3.2.0)
Release 4					
ARIB	ARIB STD-T63-27.005	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27005-421.pdf
ATIS	ATIS.3GPP.27.005V421-2006	4.2.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.005	4.2.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 005	4.2.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v421
TTA	TTAT.3G-27.005(R4-4.2.1)	4.2.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R4-4.2.1)

Release 5

ARIB	ARIB STD-T63-27.005	5.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27005-501.pdf
ATIS	ATIS.3GPP.27.005V501-2006	5.0.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.005	5.0.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 005	5.0.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v501
TTA	TTAT.3G-27.005(R5-5.0.1)	5.0.1	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R5-5.0.1)

Release 6

ARIB	ARIB STD-T63-27.005	6.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A27005-601.pdf
ATIS	ATIS.3GPP.27.005V601-2006	6.0.1	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.005	6.0.1	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 005	6.0.1	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227005v601
TTA	TTAT.3G-27.005(R6-6.0.1)	6.9.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R6-6.0.1)

Release 7

ARIB	ARIB STD-T63-27.005	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A27005-700.pdf
ATIS	ATIS.3GPP.27.005V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.005	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 005	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127005v700
TTA	TTAT.3G-27.005(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-27.005	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A27005-800.pdf
ATIS	ATIS.3GPP.27.005V800-2008	8.0.0	Approved	Oct 08	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.005	8.0.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 005	8.0.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127005v800
TTA	TTAT.3G-27.005(R8-8.0.0)	8.0.0	Approved	Oct 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.005(R8-8.0.0)

5.3.2.12.28 TS 27.007**AT command set for the user equipment (UE)**

This specification describes a profile of AT commands and recommends that this profile be used for controlling mobile equipment (ME) functions and GSM network services from a terminal equipment (TE) through terminal adaptor (TA).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.007	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27007-3d0.pdf
ATIS	T1.3GPP.27.007V3130-2004	3.13.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.007	3.13.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 007	3.13.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227007v3d0
TTA	TTAT.3G-27.007(R99-3.13.0)	3.13.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.007(R99-3.13.0)

Release 4

ARIB	ARIB STD-T63-27.007	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27007-460.pdf
ATIS	T1.3GPP.27.007V460-2004	4.6.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.007	4.6.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 007	4.6.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227007v460
TTA	TTAT.3G-27.007(R4-4.6.0)	4.6.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.007(R4-4.6.0)

Release 5

ARIB	ARIB STD-T63-27.007	5.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27007-560.pdf
ATIS	ATIS.3GPP.27.007V560-2006	5.6.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.007	5.6.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 007	5.6.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v560
TTA	TTAT.3G-24.007(R5-5.6.0)	5.6.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R5-5.6.0)

Release 6

ARIB	ARIB STD-T63-27.007	6.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A27007-690.pdf
ATIS	ATIS.3GPP.27.007V690-2007	6.9.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.007	6.9.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 007	6.9.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v690
TTA	TTAT.3G-24.007(R6-6.9.0)	6.9.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R6-6.9.0)

Release 7

ARIB	ARIB STD-T63-27.007	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A27007-750.pdf
ATIS	ATIS.3GPP.27.007V750-2009	7.5.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.007	7.5.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 007	7.5.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v750
TTA	TTAT.3G-24.007(R7-7.5.0)	7.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R7-7.5.0)

Release 8

ARIB	ARIB STD-T63-27.007	8.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A27007-870.pdf
ATIS	ATIS.3GPP.27.007V870-2009	8.7.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.007	8.7.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 007	8.7.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0127007v870
TTA	TTAT.3G-24.007(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.007(R8-8.7.0)

5.3.2.12.29 TS 27.010**Terminal equipment to mobile station (TE-MS) multiplexer protocol**

This specification describes a multiplexing protocol between a mobile station and an external data terminal for the purposes of enabling multiple channels to be established for different purposes (e.g. simultaneous SMS and data call).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.010	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27010-340.pdf
ATIS	T1.3GPP.27.010V340-2002	3.4.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.010	3.4.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 010	3.4.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010UR2
TTA	TTAE.3G-27.010(R99-3.4.0)	3.4.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.010(R99-3.4.0)

Release 4

ARIB	ARIB STD-T63-27.010	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27010-420.pdf
CCSA	CCSA-TSD-TDD-27.010	4.2.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 010	4.2.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010Uv4R2
TTA	TTAE.3G-27.010(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.010(R4-4.2.0)

Release 5

ARIB	ARIB STD-T63-27.010	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27010-500.pdf
ATIS	T1.3GPP.27.010V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.010	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 010	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010v500
TTA	TTAT.3G-27.010(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R5-5.0.0)

Release 6

ARIB	ARIB STD-T63-27.010	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A27010-600.pdf
ATIS	ATIS.3GPP.27.010V600-2005	6.0.0	Approved	Apr 05	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.010	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 010	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227010v600
TTA	TTAT.3G-27.010(R6-6.0.0)	6.0.0	Approved	May 05	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R6-6.0.0)

Release 7

ARIB	ARIB STD-T63-27.010	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A27010-700.pdf
ATIS	ATIS.3GPP.27.010V700-2007	7.0.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.010	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 010	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0327010v700
TTA	TTAT.3G-27.010(R7-7.0.0)	7.0.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R7-7.0.0)

Release 8

ARIB	ARIB STD-T63-27.010	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A27010-800.pdf
ATIS	ATIS.3GPP.27.010V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.010	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 010	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0327010v800
TTA	TTAT.3G-27.010(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.010(R8-8.0.0)

5.3.2.12.30 TS 27.103**Wide area network synchronization standard**

This specification describes a definition of a wide area synchronization protocol. The synchronization protocol is based upon infrared mobile communication (IrMC) Level 4 for Release 99. The synchronization protocol is based upon SyncML from Release 4 onwards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-27.103	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A27103-310.pdf
ATIS	T1.3GPP.27.103V310-2002	3.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.103	3.1.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 103	3.1.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227103URI
TTA	TTAE.3G-27.103(R99F)	3.1.0	Approved	Dec 01	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.103(R99F)

Release 4

ARIB	ARIB STD-T63-27.103	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A27103-400.pdf
ATIS	T1.3GPP.27.103V400-2002	4.0.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.103	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 103	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227103Uv4
TTA	TTAE.3G-27.103(R4-4.0.0)	4.0.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-27.103(R4-4.0.0)

Release 5

ARIB	ARIB STD-T63-27.103	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A27103-500.pdf
ATIS	T1.3GPP.27.103V500-2003	5.0.0	Approved	Mar 03	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-27.103	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 127 103	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0227103v500
TTA	TTAT.3G-27.103(R5-5.0.0)	5.0.0	Approved	Mar 03	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-27.103(R5-5.0.0)

5.3.2.12.31 TS 23.227**Application and user interaction in the UE; Principles and specific requirements**

This Technical Specification defines the principles for scheduling resources between applications in different application execution environment (e.g. MExE, USAT etc.) and internal and external peripherals (e.g. infra-red, Bluetooth, USIM, radio interface, MMI, memory etc.).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 4					
ARIB	ARIB STD-T63-23.227	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23227-420.pdf
ATIS	T1.3GPP.23.227V420-2002	4.2.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.227	4.2.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 227	4.2.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223227Uv4R2
TTA	TTAE.3G-23.227(R4-4.2.0)	4.2.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.227(R4-4.2.0)
Release 5					
ARIB	ARIB STD-T63-23.227	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23227-510.pdf
ATIS	T1.3GPP.23.227V510-2002	5.1.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.227	5.1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 227	5.1.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGT-0223227Uv5
TTA	TTAE.3G-23.227(R5-5.1.0)	5.1.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.227(R5-5.1.0)

5.3.2.12.32 TS 23.333

Multimedia Resource Function Controller - Multimedia Resource Function Processor Mp interface; Procedures descriptions

This specification describes the functional requirements and information flows that generate procedures between the Multimedia Resource Function Controller (MRFC) and the Multimedia Resource Function Processor (MRFP), limited to information flows relevant to the Mp Interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-23.333	7.3.1	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 333	7.3.1	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0423333v731
TTA	TTAT.3G-23.333(R7-7.3.1)	7.3.1	Approved	Oct 08	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.333(R7-7.3.1)
TTC	TS-3GA-23.333(Rel7)v7.3.1	7.3.1	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts23333rel7v731.pdf
Release 8					
ATIS	ATIS.3GPP.23.333V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.333	8.3.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 333	8.3.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0423333v830
TTA	TTAT.3G-23.333(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.333(R8-8.3.0)
TTC	TS-3GA-23.333(Rel8)v8.3.0	8.3.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23333rel8v830.pdf

5.3.2.12.33 TS 23.216

Single Radio Voice Call Continuity (SRVCC)

This Technical Specification specifies the architecture enhancements for Single Radio Voice Call Continuity (SRVCC) between E-UTRAN access and 3GPP2's 1xCS, and between E-UTRAN access and 3GPP's UTRAN/GERAN accesses and between UTRAN (HSPA) access and 3GPP's UTRAN/GERAN accesses, for Circuit Switched (CS) calls that are anchored in the IMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.23.216V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.216	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 216	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223216v830
TTA	TTAT.3G-23.216(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.216(R8-8.3.0)
TTC	TS-3GA-23.216(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23216rel8v830.pdf

5.3.2.12.34 TS 23.272**Circuit Switched Fallback in Evolved Packet System**

This Technical Specification specifies the architecture enhancements for functionality to enable fallback from E-UTRAN access to UTRAN/GERAN CS domain access and to CDMA 1x RTT CS domain access, and functionality to reuse of voice and other CS-domain services (e.g. CS UDI video / SMS/ LCS / USSD) by reuse of CS infrastructure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.23.272V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.272	8.3.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 272	8.3.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223272v830
TTA	TTAT.3G-23.272(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.272(R8-8.3.0)
TTC	TS-3GA-23.272(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23272rel8v830.pdf

5.3.2.12.35 TS 29.212**Policy and charging control over Gx reference point**

This specification provides the stage 3 specification of the Gx reference point that lies between the Policy and Charging Rule Function and the Policy and Charging Enforcement Function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-29.212	7.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 212	7.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329212v780
TTA	TTAT.3G-29.212(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.212(R7-7.8.0)
TTC	TS-3GA-29.212(Rel7)v7.8.0	7.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29212rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.29.212V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.212	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 212	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329212v830
TTA	TTAT.3G-29.212(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.212(R8-8.3.0)
TTC	TS-3GA-29.212(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29212rel8v830.pdf

5.3.2.12.36 TS 29.213**Policy and charging control signalling flows and Quality of Service parameter mapping**

This specification adds detailed flows of Policy and Charging Control over the Rx and Gx reference points and their relationship with the bearer level signalling flows over the Gn interface. The present specification also describes the binding and the mapping of QoS parameters among SDP, UMTS QoS parameters, and QoS authorization parameters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-29.213	7.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 213	7.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329213v780
TTA	TTAT.3G-29.213(R7-7.8.0)	7.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.213(R7-7.8.0)
TTC	TS-3GA-29.213(Rel7)v7.8.0	7.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29213rel7v780.pdf
Release 8					
ATIS	ATIS.3GPP.29.213V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.213	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 213	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329213v830
TTA	TTAT.3G-29.213(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.213(R8-8.3.0)
TTC	TS-3GA-29.213(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29213rel8v830.pdf

5.3.2.12.37 TS 29.214**Policy and charging control over Rx reference point**

This specification provides the stage 3 specification of the Rx reference point that lies between the Application Function and the Policy and Charging Rule Function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-29.214	7.7.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 214	7.7.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329214v770
TTA	TTAT.3G-29.214(R7-7.7.0)	7.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.214(R7-7.7.0)
TTC	TS-3GA-29.214(Rel7)v7.7.0	7.7.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29214rel7v770.pdf
Release 8					
ATIS	ATIS.3GPP.29.214V840-2009	8.4.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.214	8.4.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 214	8.4.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329214v840
TTA	TTAT.3G-29.214(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.214(R8-8.4.0)
TTC	TS-3GA-29.214(Rel8)v8.4.0	8.4.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29214rel8v840.pdf

5.3.2.12.38 TS 24.259**Personal Network Management (PNM); Procedures and information flows**

This specifications provides the protocol details for enabling Personal Network management services in the IP Multimedia Core Network subsystem based on the protocols of SIP and the SDP. The present document is applicable to UEs and AS providing PNM capabilities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.259V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.259	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 259	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124259v810
TTA	TTAT.3G-24.259(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.259(R8-8.1.0)
TTC	TS-3GA-24.259(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24259rel8v810.pdf

5.3.2.12.39 TS 23.231**SIP-I based circuit-switched core network; Stage 2**

This specification defines the stage 2 description for the SIP-I based CS core network. This stage 2 shall cover the information flows between the GMSC server, MSC server and media gateways that are required to support a SIP-I based Nc interface. The present document shall show the CS core network termination of the Iu and A interfaces in order to cover the information flow stimulus to the core network and describe the interaction with the supplementary and value added services and capabilities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.23.231V830-2009	8.3.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-23.231	8.3.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 231	8.3.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0423231v830
TTA	TTAT.3G-23.231(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.231(R8-8.3.0)
TTC	TS-3GA-23.231(Rel8)v8.3.0	8.3.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23231rel8v830.pdf

5.3.2.12.40 TS 29.231**Application of SIP-I Protocols to Circuit Switched (CS) core network architecture; Stage 3**

This specification describes the protocols to be used when SIP-I is optionally used as call control protocol in a 3GPP CS core network on Nc interface. The SIP-I protocol operates between (G)MSC servers. The SIP-I architecture consists of a number of protocols. The following types of protocols are described: call control protocol, resource control protocols and user plane protocol for this architecture.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.29.231V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.231	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 231	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429231v820
TTC	TS-3GA-29.231(Rel8)v8.2.0	8.2.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29231rel8v820.pdf

5.3.2.12.41 TS 29.164**Interworking between the 3GPP Cs domain with BICC or ISUP as signalling protocol and external SIP-I networks**

This specification defines interworking procedures between a 3GPP CS domain which applies either BICC or ISUP as signalling protocol, and external networks that use SIP-I as signalling protocol. The document also describes the related interworking architecture. The present specification also defines stage 2 procedures for the control of the MGW.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-29.164	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 164	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329164v700
TTA	TTAT.3G-29.164(R7-7.0.0)	7.0.0	Approved	Apr 08	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.164(R7-7.0.0)
TTC	TS-3GA-29.164(Rel7)v7.0.0	7.0.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts29164rel7v700.pdf
Release 8					
ATIS	ATIS.3GPP.29.164V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.164	8.0.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 164	8.0.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329164v800
TTA	TTAT.3G-29.164(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.164(R8-8.0.0)
TTC	TS-3GA-29.164(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts29164rel8v800.pdf

5.3.2.12.42 TS 29.235**Interworking between SIP-I based circuit-switched core network and other networks**

This specification defines the interworking between SIP-I based circuit-switched core network with out-of-band transcoder control related procedures and: – an external SIP-I based signalling network; – an ISUP based network such as an ISUP based 3GPP CS Domain or an PSTN; – an BICC based network such as an BICC based 3GPP CS Domain; – an Internet Multimedia Subsystem.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.29.235V820-2009	8.2.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.235	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 235	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0329235v820
TTA	TTAT.3G-29.235(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.235(R8-8.2.0)
TTC	TS-3GA-29.235(Rel8)v8.2.0	8.2.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts29235rel8v820.pdf
Release 9					
TTA	TTAT.3G-29.235(R9-9.0.0)	9.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.235(R9-9.0.0)

5.3.2.12.43 TS 29.204**Signalling System No. 7 (SS7) security gateway; Architecture, functional description and protocol details**

This specification provides functional description of the SS7 Security Gateway. The document covers also network architecture, routing considerations, and protocol details.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-29.204	7.1.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 204	7.1.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGC-0429204v710
TTA	TTAT.3G-29.204(R7-7.1.0)	7.1.0	Approved	Apr 08	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.204(R7-7.1.0)
TTC	TS-3GA-29.204(Rel7)v7.1.0	7.1.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts29204rel7v710.pdf
Release 8					
ATIS	ATIS.3GPP.29.204V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-29.204	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 129 204	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0429204v800
TTA	TTAT.3G-29.204(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-29.204(R8-8.0.0)
TTC	TS-3GA-29.204(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts29204rel8v800.pdf

5.3.2.12.44 TS 24.292**IP Multimedia (IM) Core Network (CN) subsystem Centralized Services (ICS); Stage 3**

IP Multimedia (IM) Core Network (CN) subsystem centralized services (ICS) allow for the delivery of consistent IMS services to the user regardless of the attached access type (e.g. CS domain access or IP-CAN). This specification provides the protocol details for the realization of ICS based on the Session Initiation protocol (SIP), the Session Description Protocol (SDP) and the protocols of the 3GPP Circuit-Switched (CS) domain (e.g. CAP, MAP, ISUP, BICC and the NAS call control protocol for the CS access).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.292V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.292	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 292	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124292v810
TTA	TTAT.3G-24.292(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.292(R8-8.1.0)
TTC	TS-3GA-24.292(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24292rel8v810.pdf

5.3.2.12.45 TS 24.301**Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3**

This specification specifies the procedures used by the protocols for mobility management and session management between User Equipment (UE) and Mobility Management Entity (MME) in the Evolved Packet System (EPS). These protocols belong to the non-access stratum (NAS). The EPS Mobility Management (EMM) protocol defined in the present document provides procedures for the control of mobility when the User Equipment (UE) is using the Evolved UMTS Terrestrial Radio Access Network (E-UTRAN). The EMM protocol also provides control of security for the NAS protocols. The EPS Session Management (ESM) protocol defined in the present document provides procedures for the handling of EPS bearer contexts. Together with the bearer control provided by the access stratum, this protocol is used for the control of user plane bearers. For both NAS protocols the present document specifies procedures for the support of inter-system mobility between E-UTRAN and other 3GPP or non-3GPP access networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.301V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.301	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 301	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124301v810
TTA	TTAT.3G-24.301(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.301(R8-8.1.0)
TTC	TS-3GA-24.301(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24301rel8v810.pdf

5.3.2.12.46 TS 24.302**Access to the 3GPP Evolved Packet Core (EPC) via non-3GPP access networks; Stage 3**

This document specifies the discovery and network selection procedures for access to 3GPP Evolved Packet Core (EPC) via non-3GPP access networks and includes Authentication and Access Authorization using Authentication, Authorization and Accounting (AAA) procedures used for the interworking of the 3GPP EPC and the non-3GPP access networks. The present document also specifies the Tunnel management procedures used for establishing an end-to-end tunnel from the UE to the ePDG to the point of obtaining IP connectivity and includes the selection of the IP mobility mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.302V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.302	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 302	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124302v810
TTA	TTAT.3G-24.292(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.292(R8-8.1.0)
TTC	TS-3GA-24.302(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24302rel8v810.pdf

5.3.2.12.47 TS 24.303**Mobility management based on Dual-Stack Mobile IPv6; Stage 3**

This document specifies the signalling procedures for accessing the 3GPP Evolved Packet Core network and handling the mobility between 3GPP and non-3GPP accesses via the S2c reference point defined in 3GPP TS 23.402. In addition the present document specifies the procedures used for the DSMIPv6 Home Agent discovery, for bootstrapping the DSMIPv6 security association between the UE and the Home Agent and for managing the DSMIPv6 tunnel. DSMIPv6 procedures can be used independently of the underlying access technology.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.303V810-2009	8.1.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.303	8.1.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 303	8.1.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGC-0124303v810
TTA	TTAT.3G-24.301(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.301(R8-8.1.0)
TTC	TS-3GA-24.303(Rel8)v8.1.0	8.1.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts24303rel8v810.pdf

5.3.2.12.48 TS 24.304**Mobility management based on Mobile IPv4; User Equipment (UE) - Foreign Agent interface; Stage 3.**

This document describes the stage 3 aspects of mobility management for User Equipment (UE) using IETF Mobile IPv4 foreign agent mode to access the Evolved Packet Core Network (EPC) through trusted non-3GPP access networks and for mobility management of UE between the 3GPP access network and trusted non-3GPP access networks. In particular, this document describes the UE – Mobile IPv4 Foreign Agent (FA) interface stage 3 aspects, where the FA functionality is located within the access network in the non-3GPP access domain.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ATIS	ATIS.3GPP.24.304V800-2009	8.0.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-24.304	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 124 304	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGC-0124304v800
TTA	TTAT.3G-24.304(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-24.304(R8-8.0.0)
TTC	TS-3GA-24.304(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts24304rel8v800.pdf

5.3.2.13 System aspects

IMT-2000 CDMA TDD specification also includes the following documents which are useful and related to this Recommendation.

5.3.2.13.1 TS 23.002

Network architecture

This specification describes the possible architectures of the mobile system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-23.002	3.6.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 002	3.6.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v360
TTC	TS-3GA-23.002(R99)v3.6.0	3.6.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts23002r99v360.pdf
Release 4					
CCSA	CCSA-TSD-TDD-23.002	4.8.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 002	4.8.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v480
TTC	TS-3GA-23.002(Rel4)v4.8.0	4.8.0	Published	Aug 03	http://www.ttc.or.jp/imt/ts/ts23002rel4v480.pdf
Release 5					
CCSA	CCSA-TSD-TDD-23.002	5.12.0	Published	Oct 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 002	5.12.0	Published	Oct 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v5c0
TTC	TS-3GA-23.002(Rel5)v5.12.0	5.12.0	Published	Nov 03	http://www.ttc.or.jp/imt/ts/ts23002rel5v5c0.pdf
Release 6					
CCSA	CCSA-TSD-TDD-23.002	6.10.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 002	6.10.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v6a0
TTC	TS-3GA-23.002(Rel6)v6.10.0	6.10.0	Published	Feb 06	http://www.ttc.or.jp/imt/ts/ts23002rel6v6a0.pdf
Release 7					
CCSA	CCSA-TSD-TDD-23.002	7.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 002	7.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v760
TTC	TS-3GA-23.002(Rel7)v7.6.0	7.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23002rel7v760.pdf
Release 8					
CCSA	CCSA-TSD-TDD-23.002	8.4.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 002	8.4.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223002v840
TTA	TTAT.3G-23.002(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.002(R8-8.4.0)
TTC	TS-3GA-23.002(Rel8)v8.4.0	8.4.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23002rel8v840.pdf

5.3.2.13.2 TS 23.101

General UMTS architecture

This specification describes the basic physical and functional separation of UMTS. The content of this specification is limited to those features that are common to all UMTS networks independent of their origin. It identifies and names the reference points and functional groupings appearing at this level.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-23.101	3.1.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 101	3.1.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101UR1
TTC	TS-3GA-23.101(R99)v3.1.0	3.1.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts23101r99v310.pdf
Release 4					
CCSA	CCSA-TSD-TDD-23.101	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 101	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101Uv4
TTC	TS-3GA-23.101(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts23101rel4v400.pdf
Release 5					
CCSA	CCSA-TSD-TDD-23.101	5.0.1	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 101	5.0.1	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v501
TTC	TS-3GA-23.101(Rel5)v5.0.1	5.0.1	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23101rel5v501.pdf
Release 6					
CCSA	CCSA-TSD-TDD-23.101	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 101	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v600
TTC	TS-3GA-23.101(Rel6)v6.0.0	6.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23101rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-TDD-23.101	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 101	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v700
TTC	TS-3GA-23.101(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts23101rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-TDD-23.101	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 101	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223101v800
TTA	TTAT.3G-23.101(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.101(R8-8.0.0)
TTC	TS-3GA-23.101(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23101rel8v800.pdf

5.3.2.13.3 TS 23.107

QoS concept and architecture

This specification describes the framework for QoS in UMTS. The document shall be used as a living document which will cover all issues related QoS in UMTS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-23.107	3.9.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A23107-390.pdf
CCSA	CCSA-TSD-TDD-23.107	3.9.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 107	3.9.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v390
Release 4					
ARIB	ARIB STD-T63-23.107	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A23107-460.pdf
CCSA	CCSA-TSD-TDD-23.107	4.6.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 107	4.6.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v460
Release 5					
ARIB	ARIB STD-T63-23.107	5.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23107-5d0.pdf
CCSA	CCSA-TSD-TDD-23.107	5.13.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 107	5.13.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v5d0
Release 6					
ARIB	ARIB STD-T63-23.107	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23107-640.pdf
CCSA	CCSA-TSD-TDD-23.107	6.4.0	Published	May 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 107	6.4.0	Published	May 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v640
Release 7					
ARIB	ARIB STD-T63-23.107	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23107-710.pdf
CCSA	CCSA-TSD-TDD-23.107	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 107	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v710
Release 8					
ARIB	ARIB STD-T63-23.107	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23107-800.pdf
CCSA	CCSA-TSD-TDD-23.107	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 107	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223107v800
TTA	TTAT.3G-23.107(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.107(R8-8.0.0)

5.3.2.13.4 TS 23.121**Architectural requirements for release 1999**

This specification describes architectural requirements for release 1999 related to the evolution of the GSM platform towards UMTS with the overall goal of fulfilling the UMTS service requirements, support of roaming and support of new functionality, signalling systems and interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-23.121	3.6.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 121	3.6.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223121v360
TTA	TTAE.3G-23.121(R99-3.6.0)	3.6.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-23.121(R99-3.6.0)
TTC	TS-3GA-23.121(R99)v3.6.0	3.6.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts23121r99v360.pdf

5.3.2.13.5 TS 23.228**IP Multimedia Subsystem Stage 2**

This specification describes the architectural requirement for an IP Multimedia Components incorporated in an UMTS System as well as second generation systems for GSM inside the core network and identify relevant interfaces to the existing system and the new one in between the new components incorporated.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-23.228	5.15.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A23228-5f0.pdf
CCSA	CCSA-TSD-TDD-23.228	5.15.0	Published	Aug 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 228	5.15.0	Published	Aug 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v5f0
TTC	TS-3GA-23.228(Rel5)v5.15.0	5.15.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts23228rel5v5f0.pdf
Release 6					
ARIB	ARIB STD-T63-23.228	6.16.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A23228-6g0.pdf
CCSA	CCSA-TSD-TDD-23.228	6.16.0	Published	Mar 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 228	6.16.0	Published	Mar 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v6g0
TTC	TS-3GA-23.228(Rel6)v6.16.0	6.16.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23228rel6v6g0.pdf
Release 7					
ARIB	ARIB STD-T63-23.228	7.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A23228-7e0.pdf
CCSA	CCSA-TSD-TDD-23.228	7.14.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 228	7.14.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v7e0
TTC	TS-3GA-23.228(Rel7)v7.14.0	7.14.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts23228rel7v7e0.pdf
Release 8					
ARIB	ARIB STD-T63-23.228	8.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A23228-880.pdf
CCSA	CCSA-TSD-TDD-23.228	8.8.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 228	8.8.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223228v880
TTA	TTAT.3G-23.228(R8-8.8.0)	8.8.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.228(R8-8.8.0)
TTC	TS-3GA-23.228(Rel8)v8.8.0	8.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23228rel8v880.pdf

5.3.2.13.6 TS 23.401**GPRS enhancements for E-UTRAN access**

This Technical Specification defines the stage 2 service description for the Evolved 3GPP Packet Switched Domain – also called the Evolved Packet System (EPS) in this document. The Evolved 3GPP Packet Switched Domain provides IP connectivity using the Evolved Universal Terrestrial Radio Access Network (E-UTRAN). The specification also covers mobility between E-UTRAN and pre-E-UTRAN 3GPP radio access technologies.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
CCSA	CCSA-TSD-TDD-23.401	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 401	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223401v850
TTA	TTAT.3G-23.401(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.401(R8-8.5.0)
TTC	TS-3GA-23.401(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23401rel8v850.pdf

5.3.2.13.7 TS 23.402**Architecture Enhancements for non-3GPP accesses**

This Technical Specification defines the stage 2 service description for providing IP connectivity using non-3GPP accesses to the Evolved 3GPP Packet Switched domain. In addition, for E-UTRAN and non-3GPP accesses, the specification describes the Evolved 3GPP PS Domain where the protocols between its Core Network elements are IETF based.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
CCSA	CCSA-TSD-TDD-23.402	8.5.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 123 402	8.5.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0223402v850
TTA	TTAT.3G-23.402(R8-8.5.0)	8.5.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-23.402(R8-8.5.0)
TTC	TS-3GA-23.402(Rel8)v8.5.0	8.5.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts23402rel8v850.pdf

5.3.2.13.8 TR 23.930**Iu principles**

This specification describes the requirements on the Iu and studies relevant principles to guide further standardization of the related interface(s).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-23.930	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 123 930	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0223930U
TTC	TR-3GA-23.930(R99)v3.0.0	3.0.0	Published	Feb 02	http://www.ttc.or.jp/imt/tr/tr23930r99v300.pdf
Release 4					
CCSA	CCSA-TSD-TDD-23.930	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 123 930	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0223930Uv4
TTC	TR-3GA-23.930(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/tr/tr23930rel4v400.pdf

5.3.2.13.9 TS 22.002

Bearer services supported by a GSM PLMN

This 3G specification describes a set of bearer services to be provided to 3G subscribers by a 3G network itself and in connection with other networks. This document is also be used as a reference for defining the corresponding required mobile network capabilities which are specified by means of the connection type concept.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.002	3.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22002-360.pdf
CCSA	CCSA-TSD-TDD-22.002	3.6.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 002	3.6.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002UR4
Release 4					
ARIB	ARIB STD-T63-22.002	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22002-420.pdf
CCSA	CCSA-TSD-TDD-22.002	4.2.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 002	4.2.0	Published	Jul 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002Uv4R1
Release 5					
ARIB	ARIB STD-T63-22.002	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22002-500.pdf
CCSA	CCSA-TSD-TDD-22.002	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 002	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v500
Release 6					
ARIB	ARIB STD-T63-22.002	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22002-600.pdf
CCSA	CCSA-TSD-TDD-22.002	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 002	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v600
Release 7					
ARIB	ARIB STD-T63-22.002	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22002-700.pdf
CCSA	CCSA-TSD-TDD-22.002	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 002	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v700
Release 8					
ARIB	ARIB STD-T63-22.002	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22002-800.pdf
CCSA	CCSA-TSD-TDD-22.002	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 002	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122002v800
TTA	TTAT.3G-22.002(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.002(R8-8.0.0)

5.3.2.13.10 TS 22.004

General on supplementary services

This specification describes a recommended set of supplementary services to the teleservices and bearer services which will be supported by a 3G network in connection with other networks as a basis for the definition of the network capabilities required.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.004	3.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 004	3.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v330
TTC	TS-3GA-22.004(R99)v3.3.0	3.3.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22004r99v330.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.004	4.3.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 004	4.3.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v430
TTC	TS-3GA-22.004(Rel4)v4.3.0	4.3.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts22004rel4v430.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.004	5.1.0	Published	Jun 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 004	5.1.0	Published	Jun 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v510
TTC	TS-3GA-22.004(Rel5)v5.1.0	5.1.0	Published	Aug 04	http://www.ttc.or.jp/imt/ts/ts22004rel5v510.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.004	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 004	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v600
TTC	TS-3GA-22.004(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22004rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.004	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 004	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v700
TTC	TS-3GA-22.004(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22004rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.004	8.0.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 004	8.0.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122004v800
TTA	TTAT.3G-22.004(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.004(R8-8.0.0)
TTC	TS-3GA-22.004(Rel8)v8.0.0	8.0.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22004rel8v800.pdf

5.3.2.13.11 TS 22.011

Service accessibility

This specification describes the service access procedures as presented to the user. The document contains definitions and procedures are provided for international roaming, national roaming and regionally provided service. These are mandatory in relation to the technical realization of the UE.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.011	3.8.0	Published	Sep 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 011	3.8.0	Published	Sep 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v380
TTC	TS-3GA-22.011(R99)v3.8.0	3.8.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts22011r99v380.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.011	4.8.0	Published	Sep 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 011	4.8.0	Published	Sep 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v480
TTC	TS-3GA-22.011(Rel4)v4.8.0	4.8.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts22011rel4v480.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.011	5.1.0	Published	Sep 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 011	5.1.0	Published	Sep 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v510
TTC	TS-3GA-22.011(Rel5)v5.1.0	5.1.0	Published	Nov 02	http://www.ttc.or.jp/imt/ts/ts22011rel5v510.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.011	6.4.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 011	6.4.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v640
TTC	TS-3GA-22.011(Rel6)v6.4.0	6.4.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22011rel6v640.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.011	7.9.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 011	7.9.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v790
TTC	TS-3GA-22.011(Rel7)v7.9.0	7.9.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22011rel7v790.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.011	8.7.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 011	8.7.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122011v870
TTA	TTAT.3G-22.011(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.011(R8-8.7.0)
TTC	TS-3GA-22.011(Rel8)v8.7.0	8.7.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts22011rel8v870.pdf

5.3.2.13.12 TS 22.016

International mobile equipment identities (IMEI)

This specification describes the principal purpose and use of unique equipment identities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.016	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22016-330.pdf
CCSA	CCSA-TSD-TDD-22.016	3.3.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 016	3.3.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v330
Release 4					
ARIB	ARIB STD-T63-22.016	4.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22016-421.pdf
CCSA	CCSA-TSD-TDD-22.016	4.2.1	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 016	4.2.1	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v421
Release 5					
ARIB	ARIB STD-T63-22.016	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22016-500.pdf
CCSA	CCSA-TSD-TDD-22.016	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 016	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v500
Release 6					
ARIB	ARIB STD-T63-22.016	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22016-600.pdf
CCSA	CCSA-TSD-TDD-22.016	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 016	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v600
Release 7					
ARIB	ARIB STD-T63-22.016	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22016-710.pdf
CCSA	CCSA-TSD-TDD-22.016	7.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 016	7.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v710
Release 8					
ARIB	ARIB STD-T63-22.016	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22016-800.pdf
CCSA	CCSA-TSD-TDD-22.016	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 016	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122016v800
TTA	TTAT.3G-22.016(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.016(R8-8.0.0)

5.3.2.13.13 TS 22.022

Personalization of GSM ME mobile functionality specification – Stage 1

This specification describes functional specifications of five features to personalize UE. These features are called: – network personalization; – network subset personalization; – service provider (SP) personalization; – corporate personalization; – UMTS subscriber identity module (USIM) personalization. This specification describes requirements for UE, which provide these personalization features.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.022	3.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22022-321.pdf
CCSA	CCSA-TSD-TDD-22.022	3.2.1	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 022	3.2.1	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v321
Release 4					
ARIB	ARIB STD-T63-22.022	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22022-410.pdf
CCSA	CCSA-TSD-TDD-22.022	4.1.0	Published	Jun 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 022	4.1.0	Published	Jun 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v410
Release 5					
ARIB	ARIB STD-T63-22.022	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22022-500.pdf
CCSA	CCSA-TSD-TDD-22.022	5.0.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 022	5.0.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v500
Release 6					
ARIB	ARIB STD-T63-22.022	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22022-600.pdf
CCSA	CCSA-TSD-TDD-22.022	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 022	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v600
Release 7					
ARIB	ARIB STD-T63-22.022	7.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22022-720.pdf
CCSA	CCSA-TSD-TDD-22.022	7.2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 022	7.2.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v720
Release 8					
ARIB	ARIB STD-T63-22.022	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22022-800.pdf
CCSA	CCSA-TSD-TDD-22.022	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 022	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0322022v800
TTA	TTAT.3G-22.022(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/tasDown.jsp?where=14688&pk_num=TTAT.3G-22.022(R8-8.0.0)

5.3.2.13.14 TS 22.034

High speed circuit switched data (HSCSD) – Stage 1

This specification describes the Stage 1 description of HSCSD. HSCSD is a feature that allows users subscribing to the general bearer services to access user rates that can be achieved with one or more traffic channel. HSCSD also defines a flexible use of air interface resources, which makes efficient and flexible use of higher user rates feasible.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.034	3.2.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22034-321.pdf
CCSA	CCSA-TSD-TDD-22.034	3.2.1	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 034	3.2.1	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034UR1
Release 4					
ARIB	ARIB STD-T63-22.034	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22034-410.pdf
CCSA	CCSA-TSD-TDD-22.034	4.1.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 034	4.1.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v410
Release 5					
ARIB	ARIB STD-T63-22.034	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22034-500.pdf
CCSA	CCSA-TSD-TDD-22.034	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 034	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v500
Release 6					
ARIB	ARIB STD-T63-22.034	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22034-600.pdf
CCSA	CCSA-TSD-TDD-22.034	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 034	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v600
Release 7					
ARIB	ARIB STD-T63-22.034	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22034-700.pdf
CCSA	CCSA-TSD-TDD-22.034	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 034	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v700
Release 8					
ARIB	ARIB STD-T63-22.034	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22034-800.pdf
CCSA	CCSA-TSD-TDD-22.034	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 034	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122034v800
TTA	TTAT.3G-22.034(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.034(R8-8.0.0)

5.3.2.13.15 TS 22.038

SIM application toolkit (SAT) – Stage 1

This specification describes the Stage 1 description of the SAT primarily from the subscriber's and serving environment's points of view, and does not deal with the details of the human interface itself. It includes information applicable to network operators, serving environments and terminal, switch and database manufacturers and contains the core requirements for a SAT which are sufficient to provide a complete service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.038	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22038-340.pdf
CCSA	CCSA-TSD-TDD-22.038	3.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 038	3.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v340
Release 4					
ARIB	ARIB STD-T63-22.038	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22038-430.pdf
CCSA	CCSA-TSD-TDD-22.038	4.3.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 038	4.3.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v430
Release 5					
ARIB	ARIB STD-T63-22.038	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22038-540.pdf
CCSA	CCSA-TSD-TDD-22.038	5.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 038	5.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v540
Release 6					
ARIB	ARIB STD-T63-22.038	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22038-650.pdf
CCSA	CCSA-TSD-TDD-22.038	6.5.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 038	6.5.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v650
Release 7					
ARIB	ARIB STD-T63-22.038	7.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22038-750.pdf
CCSA	CCSA-TSD-TDD-22.038	7.5.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 038	7.5.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v750
Release 8					
ARIB	ARIB STD-T63-22.038	8.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22038-801.pdf
CCSA	CCSA-TSD-TDD-22.038	8.0.1	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 038	8.0.1	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122038v801
TTA	TTAT.3G-22.038(R8-8.0.1)	8.0.1	Approved	Jul 09	http://www.fta.or.kr/data/tasDown.jsp?where=14688&pk_num=TTAT.3G-22.038(R8-8.0.1)

5.3.2.13.16 TS 22.060

General packet radio service (GPRS) – Stage 1

This specification describes the Stage 1 description of the GPRS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.060	3.5.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 060	3.5.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060UR3
TTC	TS-3GA-22.060(R99)v3.5.0	3.5.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts22060r99v350.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.060	4.4.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 060	4.4.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v440
TTC	TS-3GA-22.060(Rel4)v4.4.0	4.4.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22060rel4v440.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.060	5.3.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 060	5.3.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v530
TTC	TS-3GA-22.060(Rel5)v5.3.0	5.3.0	Published	May 03	http://www.ttc.or.jp/imt/ts/ts22060rel5v530.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.060	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 060	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v600
TTC	TS-3GA-22.060(Rel6)v6.0.0	6.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22060rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.060	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 060	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v700
TTC	TS-3GA-22.060(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22060rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.060	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 060	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122060v800
TTA	TTAT.3G-22.060(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.060(R8-8.0.0)
TTC	TS-3GA-22.060(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22060rel8v800.pdf

5.3.2.13.17 TS 22.067**Priority set-up service – Stage 1 (ASCI spec)**

This specification describes the Stage 1 description of the enhanced multi-level precedence and pre-emption (eMLPP) service. This service has two parts: precedence and pre-emption. Precedence involves assigning a priority level to a call in combination with fast call set-up. Pre-emption involves the seizing of resources, which are in use by a call of a lower precedence, by a higher level precedence call in the absence of idle resources. Pre-emption can also involve the disconnection of an on-going call of lower precedence to accept an incoming call of higher precedence.

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Release 99					
ARIB	ARIB STD-T63-22.067	3.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22067-301.pdf
CCSA	CCSA-TSD-TDD-22.067	3.0.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 067	3.0.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0122067U
Release 4					
ARIB	ARIB STD-T63-22.067	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22067-410.pdf
CCSA	CCSA-TSD-TDD-22.067	4.1.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 067	4.1.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067Uv4R1
Release 5					
ARIB	ARIB STD-T63-22.067	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22067-500.pdf
CCSA	CCSA-TSD-TDD-22.067	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 067	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v500
Release 6					
ARIB	ARIB STD-T63-22.067	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22067-610.pdf
CCSA	CCSA-TSD-TDD-22.067	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 067	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v610
Release 7					
ARIB	ARIB STD-T63-22.067	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22067-700.pdf
CCSA	CCSA-TSD-TDD-22.067	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 067	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v700
Release 8					
ARIB	ARIB STD-T63-22.067	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22067-800.pdf
CCSA	CCSA-TSD-TDD-22.067	8.0.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 067	8.0.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122067v800
TTA	TTAT.3G-22.067(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.067(R8-8.0.0)

5.3.2.13.18 TS 22.071

Location services (LCS) – Stage 1

LCS is a network provided enabling technology consisting of standardized service capabilities which enables the provision of location applications. This application may be service provider specific. The description of the numerous and varied possible location applications which are enabled by this technology are outside the scope of this specification. However, clarifying examples of how the functionality being specified may be used to provide specific LCS is included in various sections of the specification.

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Release 99					
ARIB	ARIB STD-T63-22.071	3.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22071-350.pdf
CCSA	CCSA-TSD-TDD-22.071	3.5.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 071	3.5.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v350
Release 4					
ARIB	ARIB STD-T63-22.071	4.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22071-460.pdf
CCSA	CCSA-TSD-TDD-22.071	4.6.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 071	4.6.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v460
Release 5					
ARIB	ARIB STD-T63-22.071	5.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22071-540.pdf
CCSA	CCSA-TSD-TDD-22.071	5.4.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 071	5.4.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v540
Release 6					
ARIB	ARIB STD-T63-22.071	6.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22071-670.pdf
CCSA	CCSA-TSD-TDD-22.071	6.7.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 071	6.7.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v670
Release 7					
ARIB	ARIB STD-T63-22.071	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22071-740.pdf
CCSA	CCSA-TSD-TDD-22.071	7.4.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 071	7.4.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v740
Release 8					
ARIB	ARIB STD-T63-22.071	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22071-810.pdf
CCSA	CCSA-TSD-TDD-22.071	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 071	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122071v810
TTA	TTAT.3G-22.071(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.071(R8-8.1.0)

5.3.2.13.19 TS 22.078**Customized applications for mobile network enhanced logic (CAMEL) – Stage 1**

This specification describes the Stage 1 description for CAMEL feature which provides the mechanisms to support services consistently independently of the serving network. The CAMEL features shall facilitate service control of operator specific services external from the serving network. The CAMEL feature is a network feature and not a supplementary service. It is a tool to help the network operator to provide the subscribers with the operator specific services even when roaming outside the home network.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.078	3.9.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 078	3.9.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078UR7
TTC	TS-3GA-22.078(R99)v3.9.0	3.9.0	Published	May 02	http://www.ttc.or.jp/imt/ts/ts22078r99v390.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.078	4.5.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 078	4.5.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078Uv4R3
TTC	TS-3GA-22.078(Rel4)v4.5.0	4.5.0	Published	May 02	http://www.ttc.or.jp/imt/ts/ts22078rel4v450.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.078	5.15.0	Published	Apr 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 078	5.15.0	Published	Apr 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v5f0
TTC	TS-3GA-22.078(Rel5)v5.15.0	5.15.0	Published	May 05	http://www.ttc.or.jp/imt/ts/ts22078rel5v5f0.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.078	6.9.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 078	6.9.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v690
TTC	TS-3GA-22.078(Rel6)v6.9.0	6.9.0	Published	Nov 05	http://www.ttc.or.jp/imt/ts/ts22078rel6v690.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.078	7.6.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 078	7.6.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v760
TTC	TS-3GA-22.078(Rel7)v7.6.0	7.6.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22078rel7v760.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.078	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 078	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122078v800
TTA	TTAT.3G-22.078(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.078(R8-8.0.0)
TTC	TS-3GA-22.078(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22078rel8v800.pdf

5.3.2.13.20 TS 22.090

Unstructured supplementary service data (USSD) – Stage 1

There are two modes of USSD: MMI-mode and application mode. MMI-mode USSD is for the transparent transport of MMI strings entered by the user to the network and for the transparent transport of text strings from the network that are displayed by the mobile for user information. Application mode USSD is for the transparent transport of data between the network and the mobile station. Application mode USSD is intended to be used by applications in the network and their peer applications in the UE. The communication over the radio interface takes place on the signalling channels using short dialogues with peak data throughput rate capabilities of up to approximately 600 bit/s outside of a call and 1 000 bit/s during a call.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.090	3.1.0	Published	May 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 090	3.1.0	Published	May 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090UR1
TTC	TS-3GA-22.090(R99)v3.1.0	3.1.0	Published	Nov 00	http://www.ttc.or.jp/imt/ts/ts22090r99v310.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.090	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 090	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090Uv4
TTC	TS-3GA-22.090(Rel4)v4.0.0	4.0.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts22090rel4v400.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.090	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 090	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v500
TTC	TS-3GA-22.090(Rel5)v5.0.0	5.0.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22090rel5v500.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.090	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 090	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v600
TTC	TS-3GA-22.090(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22090rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.090	7.0.0	Published	Sep 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 090	7.0.0	Published	Sep 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v700
TTC	TS-3GA-22.090(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22090rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.090	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 090	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122090v800
TTA	TTAT.3G-22.090(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.090(R8-8.0.0)
TTC	TS-3GA-22.090(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22090rel8v800.pdf

5.3.2.13.21 TS 22.100**UMTS phase 1 capabilities**

This specification describes contains how the definition of the UMTS system will be achieved in a phased approach. This document also specifies the requirements for release 99 of UMTS. Some requirements which are necessary to ensure a smooth transition to later releases are also indicated. This document should, however, be read in conjunction with the other 22.000 series documents which provide a complete description of the requirements for UMTS release 1999 and beyond.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.100	3.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22100-370.pdf
CCSA	CCSA-TSD-TDD-22.100	3.7.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 100	3.7.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122100UR2
TTA	TTAE.3G-22.100(R99-3.7.0)	3.7.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-22.100(R99-3.7.0)

5.3.2.13.22 TS 22.101**UMTS service principles**

This specification describes the service principles of the UMTS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.101	3.17.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22101-3h0.pdf
CCSA	CCSA-TSD-TDD-22.101	3.17.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 101	3.17.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v3h0
Release 4					
ARIB	ARIB STD-T63-22.101	4.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22101-4a0.pdf
CCSA	CCSA-TSD-TDD-22.101	4.10.0	Published	Apr 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 101	4.10.0	Published	Apr 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v4a0
Release 5					
ARIB	ARIB STD-T63-22.101	5.14.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22101-5e0.pdf
CCSA	CCSA-TSD-TDD-22.101	5.14.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 101	5.14.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v5e0
Release 6					
ARIB	ARIB STD-T63-22.101	6.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22101-6c0.pdf
CCSA	CCSA-TSD-TDD-22.101	6.12.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 101	6.12.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v6c0
Release 7					
ARIB	ARIB STD-T63-22.101	7.12.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22101-7c0.pdf
CCSA	CCSA-TSD-TDD-22.101	7.12.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 101	7.12.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v7c0

Release 8

ARIB	ARIB STD-T63-22.101	8.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22101-8b0.pdf
CCSA	CCSA-TSD-TDD-22.101	8.11.0	Published	Mar 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 101	8.11.0	Published	Mar 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122101v8b0
TTA	TTAT.3G-22.101(R8-8.11.0)	8.11.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.101(R8-8.11.0)

5.3.2.13.23 TS 22.105**Services and service capabilities**

Pre-UMTS systems have largely standardized the complete sets of bearer services, teleservices and supplementary services which they provide. One major difference between UMTS and pre-UMTS systems is that service capabilities rather than services are standardized for UMTS, allowing service differentiation and system continuity. This document describes how and what kind of services the UMTS user has access to.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-22.105	3.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A22105-3a0.pdf
CCSA	CCSA-TSD-TDD-22.105	3.10.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 105	3.10.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105UR3
Release 4					
ARIB	ARIB STD-T63-22.105	4.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A22105-430.pdf
CCSA	CCSA-TSD-TDD-22.105	4.3.0	Published	Apr 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 105	4.3.0	Published	Apr 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105Uv4R1
Release 5					
ARIB	ARIB STD-T63-22.105	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R/Rel5/A22105-520.pdf
CCSA	CCSA-TSD-TDD-22.105	5.2.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 105	5.2.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v520
Release 6					
ARIB	ARIB STD-T63-22.105	6.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22105-640.pdf
CCSA	CCSA-TSD-TDD-22.105	6.4.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 105	6.4.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v640
Release 7					
ARIB	ARIB STD-T63-22.105	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22105-710.pdf
CCSA	CCSA-TSD-TDD-22.105	7.1.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 105	7.1.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v710
Release 8					
ARIB	ARIB STD-T63-22.105	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22105-840.pdf
CCSA	CCSA-TSD-TDD-22.105	8.4.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 105	8.4.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122105v840
TTA	TTAT.3G-22.105(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.105(R8-8.4.0)

5.3.2.13.24 TS 22.115**Service aspects: charging and billing**

This specification describes the service aspects of charging and billing of the UMTS. This standard is not intended to duplicate existing standards or standards being developed by other groups on these topics, and will reference these where appropriate. This standard will elaborate on the charging requirements described in the charging principles in TS 22.101 UMTS service principles. It will allow the generation of accurate charging information to be used in the commercial and contractual relationships between the parties concerned.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.115	3.4.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 115	3.4.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v340
TTC	TS-3GA-22.115(R99)v3.4.0	3.4.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts22115r99v340.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.115	4.1.0	Published	Jan 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 115	4.1.0	Published	Jan 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v410
TTC	TS-3GA-22.115(Rel4)v4.1.0	4.1.0	Published	Feb 04	http://www.ttc.or.jp/imt/ts/ts22115rel4v410.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.115	5.5.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 115	5.5.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v550
TTC	TS-3GA-22.115(Rel5)v5.5.0	5.5.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22115rel5v550.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.115	6.8.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 115	6.8.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v680
TTC	TS-3GA-22.115(Rel6)v6.8.0	6.8.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22115rel6v680.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.115	7.1.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 115	7.1.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v710
TTC	TS-3GA-22.115(Rel7)v7.1.0	7.1.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22115rel7v710.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.115	8.3.0	Published	Apr 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 115	8.3.0	Published	Apr 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122115v830
TTA	TTAT.3G-22.115(R8-8.3.0)	8.3.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.115(R8-8.3.0)
TTC	TS-3GA-22.115(Rel8)v8.3.0	8.3.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22115rel8v830.pdf

5.3.2.13.25 TS 22.129

Handover requirements between UMTS and GSM or other radio systems

This specification describes service requirements for handover (terms are defined below) within UMTS systems and between UMTS, other IMT-2000 family members and second generation systems. Particular emphasis has been placed on the description of requirements for handover between UMTS and GSM but requirements specific to other systems are incorporated as required.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.129	3.6.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 129	3.6.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129UR4
TTC	TS-3GA-22.129(R99)v3.6.0	3.6.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts22129r99v360.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.129	4.4.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 129	4.4.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129Uv4R2
TTC	TS-3GA-22.129(Rel4)v4.4.0	4.4.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts22129rel4v440.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.129	5.2.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 129	5.2.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v520
TTC	TS-3GA-22.129(Rel5)v5.2.0	5.2.0	Published	Aug 02	http://www.ttc.or.jp/imt/ts/ts22129rel5v520.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.129	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 129	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v610
TTC	TS-3GA-22.129(Rel6)v6.1.0	6.1.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22129rel6v610.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.129	7.0.0	Published	Apr 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 129	7.0.0	Published	Apr 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v700
TTC	TS-3GA-22.129(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22129rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.129	8.1.0	Published	Jan 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 129	8.1.0	Published	Jan 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122129v810
TTA	TTAT.3G-22.129(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.129(R8-8.1.0)
TTC	TS-3GA-22.129(Rel8)v8.1.0	8.1.0	Published	Oct 08	http://www.ttc.or.jp/imt/ts/ts22129rel8v810.pdf

5.3.2.13.26 TS 22.135

Multicall

This specification describes multicall scenarios and requirements for UMTS phase 1 release 1999. Multicall feature specifies functionality and interactions related to usage of several simultaneous bearers between a terminal and a network. Multicall features allows both circuit-switched call(s) and packet session(s) to exist simultaneously.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.135	3.4.0	Published	Nov 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 135	3.4.0	Published	Nov 00	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135UR3
TTC	TS-3GA-22.135(R99)v3.4.0	3.4.0	Published	May 01	http://www.ttc.or.jp/imt/ts/ts22135r99v340.pdf
Release 4					
CCSA	CCSA-TSD-TDD-22.135	4.2.0	Published	Dec 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
CCSA	CCSA-TSD-TDD-22.135	4.2.0	Published	Dec 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 135	4.2.0	Published	Dec 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v420
ETSI	ETSI TS 122 135	4.2.0	Published	Dec 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v420
TTC	TS-3GA-22.135(Rel4)v4.2.0	4.2.0	Published	Feb 03	http://www.ttc.or.jp/imt/ts/ts22135rel4v420.pdf
Release 5					
CCSA	CCSA-TSD-TDD-22.135	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 135	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v500
TTC	TS-3GA-22.135(Rel5)v5.0.0	5.0.0	Published	Feb 02	http://www.ttc.or.jp/imt/ts/ts22135rel5v500.pdf
Release 6					
CCSA	CCSA-TSD-TDD-22.135	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 135	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v600
TTC	TS-3GA-22.135(Rel6)v6.0.0	6.0.0	Published	Mar 05	http://www.ttc.or.jp/imt/ts/ts22135rel6v600.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.135	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 135	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v700
TTC	TS-3GA-22.135(Rel7)v7.0.0	7.0.0	Published	Jan 08	http://www.ttc.or.jp/imt/ts/ts22135rel7v700.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.135	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 135	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122135v800
TTA	TTAT.3G-22.135(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.135(R8-8.0.0)
TTC	TS-3GA-22.135(Rel8)v8.0.0	8.0.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22135rel8v800.pdf

5.3.2.13.27 TS 22.146

Multimedia Broadcast/Multicast Service (MBMS) user services; Stage 1

The document describes MBMS User Services that use the capabilities of MBMS. Application scenarios including charging, QoS aspects and related service requirements derived from them are described. These scenarios and service requirements can be used as guidance for the design of codecs and bearers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ARIB	ARIB STD-T63-22.146	6.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22146-680.pdf
CCSA	CCSA-TSD-TDD-22.146	6.8.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 146	6.8.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122146v680
Release 7					
ARIB	ARIB STD-T63-22.146	7.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22146-730.pdf
CCSA	CCSA-TSD-TDD-22.146	7.3.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 146	7.3.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122146v730
Release 8					
ARIB	ARIB STD-T63-22.146	8.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22146-840.pdf
CCSA	CCSA-TSD-TDD-22.146	8.4.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 146	8.4.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122146v840
TTA	TTAT.3G-22.146(R8-8.4.0)	8.4.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.146(R8-8.4.0)

5.3.2.13.28 TS 22.153

Multimedia priority service

The document specifies the service requirements for Multimedia Priority Service (MPS). Its scope is to specify those requirements of MPS necessary to provide an end-to-end service and to interwork with external networks where needed. Service interactions with external networks are considered within the scope of this document although these interactions may be specified in other standards.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-22.153	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22153-820.pdf
CCSA	CCSA-TSD-TDD-22.153	8.2.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 153	8.2.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122153v820
TTA	TTAT.3G-22.153(R8-8.2.0)	8.2.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.153(R8-8.2.0)

5.3.2.13.29 TS 22.168**Earthquake and Tsunami Warning System**

The Document defines the stage one description of the Earthquake and Tsunami Warning System (ETWS) Requirements. Stage one is the set of requirements seen primarily from the users' and service providers' points of view. It includes information applicable to network operators, service providers, terminal and network manufacturers, in case of deployment of ETWS. ETWS deployment depends on operator decision or national regulations. The TS contains the core requirements for the Earthquake and Tsunami Warning System, which are sufficient to provide a complete service. It also contains regional requirements for Earthquake and Tsunami Warning System.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-22.168	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22168-810.pdf
CCSA	CCSA-TSD-TDD-22.168	8.1.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 168	8.1.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0122168v810
TTA	TTAT.3G-22.168(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.168(R8-8.1.0)

5.3.2.13.30 TS 22.173**Multimedia Telephony Service and supplementary services; Stage 1**

The document defines the IMS Multimedia Telephony service and the minimum set of capabilities required to secure multi-vendor and multi-operator inter-operability for Multimedia Telephony and related Supplementary Services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
CCSA	CCSA-TSD-TDD-22.173	7.5.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 173	7.5.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122173v750
TTC	TS-3GA-22.173(Rel7)v7.5.0	7.5.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22173rel7v750.pdf
Release 8					
CCSA	CCSA-TSD-TDD-22.173	8.6.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 173	8.6.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122173v860
TTA	TTAT.3G-22.173(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.173(R8-8.6.0)
TTC	TS-3GA-22.173(Rel8)v8.6.0	8.6.0	Approved	Jul 09	http://www.ttc.or.jp/imt/ts/ts22173rel8v860.pdf

5.3.2.13.31 TS 22.228

IP Multimedia Subsystem Stage 1

This specification describes all IP Multimedia services offered by UMTS Systems and second generation systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ARIB	ARIB STD-T63-22.228	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A22228-570.pdf
CCSA	CCSA-TSD-TDD-22.228	5.7.0	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 228	5.7.0	Published	Apr 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v570
TTC	TS-3GA-22.228(Rel5)v5.7.0	5.7.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts22228rel5v570.pdf
Release 6					
ARIB	ARIB STD-T63-22.228	6.11.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A22228-6b0.pdf
CCSA	CCSA-TSD-TDD-22.228	6.11.0	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 228	6.11.0	Published	Apr 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v6b0
TTC	TS-3GA-22.228(Rel6)v6.11.0	6.11.0	Published	Mar 07	http://www.ttc.or.jp/imt/ts/ts22228rel6v6b0.pdf
Release 7					
ARIB	ARIB STD-T63-22.228	7.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A22228-760.pdf
CCSA	CCSA-TSD-TDD-22.228	7.6.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 228	7.6.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v760
TTC	TS-3GA-22.228(Rel7)v7.6.0	7.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22228rel7v760.pdf
Release 8					
ARIB	ARIB STD-T63-22.228	8.6.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22228-860.pdf
CCSA	CCSA-TSD-TDD-22.228	8.6.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 228	8.6.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122228v860
TTA	TTAT.3G-22.228(R8-8.6.0)	8.6.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.228(R8-8.6.0)
TTC	TS-3GA-22.228(Rel8)v8.6.0	8.6.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/ts22228rel8v860.pdf

5.3.2.13.32 TS 22.234

Requirements on 3GPP system to Wireless Local Area Network (WLAN) interworking

The document specifies the functional requirements placed on the 3GPP system for interworking WLAN with the 3GPP system. Guidance is given for WLAN operators intending to provide the interworked WLAN capability.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
CCSA	CCSA-TSD-TDD-22.234	6.4.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 234	6.4.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122234v640
TTC	TS-3GA-22.234(Rel6)v6.4.0	6.4.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts22234rel6v640.pdf
Release 7					
CCSA	CCSA-TSD-TDD-22.234	7.6.0	Published	Oct 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 234	7.6.0	Published	Oct 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122234v760
TTC	TS-3GA-22.234(Rel7)v7.6.0	7.6.0	Published	Mar 08	http://www.ttc.or.jp/imt/ts/ts22234rel7v760.pdf

Release 8

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
CCSA	CCSA-TSD-TDD-22.234	8.1.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 234	8.1.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0122234v810
TTA	TTAT.3G-22.234(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.234(R8-8.1.0)
TTC	TS-3GA-22.234(Rel8)v8.1.0	8.1.0	Published	Feb 09	http://www.ttc.or.jp/imt/ts/22234rel8v810.pdf

5.3.2.13.33 TS 22.278**Service requirements for the Evolved Packet System (EPS)**

The present document specifies the functional requirements placed on the 3GPP system for interworking WLAN with the 3GPP system. Guidance is given for WLAN operators intending to provide the interworked WLAN capability.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 8					
ARIB	ARIB STD-T63-22.278	8.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A22278-870.pdf
CCSA	CCSA-TSD-TDD-22.278	8.7.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 122 278	8.7.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0122278v870
TTA	TTAT.3G-22.278(R8-8.7.0)	8.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-22.278(R8-8.7.0)

5.3.2.13.34 TR 22.971**Automatic establishment of roaming relations**

This report describes a proposed framework for commercial and technical interworking between UMTS home environments and serving networks who have no direct prior commercial agreements with each other. This text is applicable to UMTS standardization within ETSI, and is produced with the intent to clarify the concepts involved, and identify those areas which require standardization.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
CCSA	CCSA-TSD-TDD-22.971	3.1.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 122 971	3.1.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0122971U
TTA	TTAE.3G-22.971(R99-3.1.1)	3.1.1	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-22.971(R99-3.1.1)
TTC	TR-3GA-22.971(R99)v3.1.1	3.1.1	Published	Feb 02	http://www.ttc.or.jp/imt/tr/tr22971r99v311.pdf

5.3.2.13.35

TS 21.133

Security threats and requirements

Detailed security requirements.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-21.133	3.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A21133-320.pdf
CCSA	CCSA-TSD-TDD-21.133	3.2.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 133	3.2.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0321133UR1

Release 4

ARIB	ARIB STD-T63-21.133	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A21133-410.pdf
CCSA	CCSA-TSD-TDD-21.133	4.1.0	Published	Jan 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 121 133	4.1.0	Published	Jan 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0321133Uv4R1

5.3.2.13.36 TS 33.102**Security architecture**

Provides a specification of all security mechanisms and protocols, except algorithms.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.102	3.13.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33102-3d0.pdf
CCSA	CCSA-TSD-TDD-33.102	3.13.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 102	3.13.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v3d0
Release 4					
ARIB	ARIB STD-T63-33.102	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33102-450.pdf
CCSA	CCSA-TSD-TDD-33.102	4.5.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 102	4.5.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v450
Release 5					
ARIB	ARIB STD-T63-33.102	5.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A33102-570.pdf
CCSA	CCSA-TSD-TDD-33.102	5.7.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 102	5.7.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v570
Release 6					
ARIB	ARIB STD-T63-33.102	6.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A33102-650.pdf
CCSA	CCSA-TSD-TDD-33.102	6.5.0	Published	Jan 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 102	6.5.0	Published	Jan 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v650
Release 7					
ARIB	ARIB STD-T63-33.102	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A33102-710.pdf
CCSA	CCSA-TSD-TDD-33.102	7.1.0	Published	Dec 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 102	7.1.0	Published	Dec 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v710
Release 8					
ARIB	ARIB STD-T63-33.102	8.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A33102-820.pdf
CCSA	CCSA-TSD-TDD-33.102	8.2.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 102	8.2.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333102v820

5.3.2.13.37 TS 33.103**Security integration guidelines**

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.103	3.7.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33103-370.pdf
CCSA	CCSA-TSD-TDD-33.103	3.7.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 103	3.7.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333103UR6
TTA	TTAE.3G-33.103(R99-3.7.0)	3.7.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.103(R99-3.7.0)
Release 4					
ARIB	ARIB STD-T63-33.103	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33103-420.pdf
CCSA	CCSA-TSD-TDD-33.103	4.2.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 103	4.2.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333103Uv4R2
TTA	TTAE.3G-33.103(R4-4.2.0)	4.2.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.103(R4-4.2.0)

5.3.2.13.38 TS 33.105**Cryptographic algorithm requirements**

Defines requirements for standard cipher and integrity algorithm.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.105	3.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33105-380.pdf
CCSA	CCSA-TSD-TDD-33.105	3.8.0	Published	Jul 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 105	3.8.0	Published	Jul 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105UR6
Release 4					
ARIB	ARIB STD-T63-33.105	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33105-420.pdf
CCSA	CCSA-TSD-TDD-33.105	4.2.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 105	4.2.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v420
Release 5					
ARIB	ARIB STD-T63-33.105	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A33105-500.pdf
CCSA	CCSA-TSD-TDD-33.105	5.0.0	Published	Jul 04	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 105	5.0.0	Published	Jul 04	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v500
Release 6					
ARIB	ARIB STD-T63-33.105	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A33105-600.pdf
CCSA	CCSA-TSD-TDD-33.105	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 105	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v600
Release 7					
ARIB	ARIB STD-T63-33.105	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A33105-700.pdf
CCSA	CCSA-TSD-TDD-33.105	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 105	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v700

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ARIB	ARIB STD-T63-33.105	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A33105-800.pdf
CCSA	CCSA-TSD-TDD-33.105	8.0.0	Published	Feb 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 105	8.0.0	Published	Feb 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333105v800
TTA	TTAT.3G-33.105(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-33.105(R8-8.0.0)

5.3.2.13.39 TS 33.106**Lawful interception requirements**

Defines all requirements for network based lawful interception.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.106	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33106-310.pdf
CCSA	CCSA-TSD-TDD-33.106	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 106	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0333106U
Release 4					
ARIB	ARIB STD-T63-33.106	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33106-400.pdf
CCSA	CCSA-TSD-TDD-33.106	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 106	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106Uv4
Release 5					
ARIB	ARIB STD-T63-33.106	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A33106-510.pdf
CCSA	CCSA-TSD-TDD-33.106	5.1.0	Published	Oct 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 106	5.1.0	Published	Oct 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v510
Release 6					
ARIB	ARIB STD-T63-33.106	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A33106-610.pdf
CCSA	CCSA-TSD-TDD-33.106	6.1.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 106	6.1.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v610
Release 7					
ARIB	ARIB STD-T63-33.106	7.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A33106-701.pdf
CCSA	CCSA-TSD-TDD-33.106	7.0.1	Published	Apr 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 106	7.0.1	Published	Apr 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v701
Release 8					
ARIB	ARIB STD-T63-33.106	8.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A33106-810.pdf
CCSA	CCSA-TSD-TDD-33.106	8.1.0	Published	Oct 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 106	8.1.0	Published	Oct 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333106v810
TTA	TTAT.3G-33.106(R8-8.1.0)	8.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-33.106(R8-8.1.0)

5.3.2.13.40 TS 33.120**Security objectives and principles**

Elaborates on the basic principles underlying the security.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-33.120	3.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33120-300.pdf
CCSA	CCSA-TSD-TDD-33.120	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 120	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0333120U
TTA	TTAE.3G-33.120(R99-3.0.0)	3.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.120(R99-3.0.0)
Release 4					
ARIB	ARIB STD-T63-33.120	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33120-400.pdf
CCSA	CCSA-TSD-TDD-33.120	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 133 120	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0333120Uv4
TTA	TTAE.3G-33.120(R4-4.0.0)	4.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.120(R4-4.0.0)

5.3.2.13.41 TR 33.901**Criteria for cryptographic algorithm design process**

This report describes the process used to design cipher and integrity algorithm.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB TR-T12-33.901	3.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33901-300.pdf
CCSA	CCSA-TSD-TDD-33.901	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 133 901	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0333901U
TTA	TTAE.3G-33.901(R99-3.0.0)	3.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.901(R99-3.0.0)
Release 4					
ARIB	ARIB TR-T12-33.901	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33901-400.pdf
CCSA	CCSA-TSD-TDD-33.901	4.0.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 133 901	4.0.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0333901Uv4
TTA	TTAE.3G-33.901(R4-4.0.0)	4.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.901(R4-4.0.0)

5.3.2.13.42 TR 33.902

Formal analysis of the 3G authentication protocol with modified sequence number management

Formal analysis using BAN and temporal logic of authentication mechanism.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB TR-T12-33.902	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A33902-310.zip
CCSA	CCSA-TSD-TDD-33.902	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 133 902	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTR/TSGS-0333902U
TTA	TTAE.3G-33.902(R99-3.1.0)	3.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.902(R99-3.1.0)
Release 4					
ARIB	ARIB TR-T12-33.902	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A33902-400.zip
CCSA	CCSA-TSD-TDD-33.902	4.0.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 133 902	4.0.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0333902Uv4
TTA	TTAE.3G-33.902(R4-4.0.0)	4.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-33.902(R4-4.0.0)

5.3.2.13.43 TS 26.071

AMR speech codec: general description

This specification describes an introduction to the set of the adaptive multi-rate (AMR) specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.071	3.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26071-301.pdf
CCSA	CCSA-TSD-TDD-26.071	3.0.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 071	3.0.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426071U
Release 4					
ARIB	ARIB STD-T63-26.071	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26071-400.pdf
CCSA	CCSA-TSD-TDD-26.071	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 071	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071Uv4
Release 5					
ARIB	ARIB STD-T63-26.071	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26071-500.pdf
CCSA	CCSA-TSD-TDD-26.071	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 071	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v500
Release 6					
ARIB	ARIB STD-T63-26.071	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26071-600.pdf
CCSA	CCSA-TSD-TDD-26.071	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 071	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v600
Release 7					
ARIB	ARIB STD-T63-26.071	7.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26071-701.pdf
CCSA	CCSA-TSD-TDD-26.071	7.0.1	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 071	7.0.1	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v701

Release 8

ARIB	ARIB STD-T63-26.071	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26071-800.pdf
CCSA	CCSA-TSD-TDD-26.071	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 071	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426071v800
TTA	TTAT.3G-26.071(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.071(R8-8.0.0)

5.3.2.13.44 TS 26.090**AMR speech codec: transcoding functions**

This specification describes a detailed description of the AMR speech codec transcoding functions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.090	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26090-310.pdf
CCSA	CCSA-TSD-TDD-26.090	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 090	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426090U
Release 4					
ARIB	ARIB STD-T63-26.090	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26090-400.pdf
CCSA	CCSA-TSD-TDD-26.090	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 090	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090Uv4
Release 5					
ARIB	ARIB STD-T63-26.090	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26090-500.pdf
CCSA	CCSA-TSD-TDD-26.090	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 090	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v500
Release 6					
ARIB	ARIB STD-T63-26.090	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26090-600.pdf
CCSA	CCSA-TSD-TDD-26.090	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 090	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v600
Release 7					
ARIB	ARIB STD-T63-26.090	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26090-700.pdf
CCSA	CCSA-TSD-TDD-26.090	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 090	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v700
Release 8					
ARIB	ARIB STD-T63-26.090	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26090-800.pdf
CCSA	CCSA-TSD-TDD-26.090	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 090	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426090v800
TTA	TTAT.3G-26.090(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.090(R8-8.0.0)

5.3.2.13.45 TS 26.091

AMR speech codec: error concealment of lost frames

This specification describes example procedures for the error concealment, also called frame substitution or muting procedure, of lost speech or silence indicator frames.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.091	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26091-310.pdf
CCSA	CCSA-TSD-TDD-26.091	3.1.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 091	3.1.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426091U
Release 4					
ARIB	ARIB STD-T63-26.091	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26091-400.pdf
CCSA	CCSA-TSD-TDD-26.091	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 091	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091Uv4
Release 5					
ARIB	ARIB STD-T63-26.091	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26091-500.pdf
CCSA	CCSA-TSD-TDD-26.091	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 091	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v500
Release 6					
ARIB	ARIB STD-T63-26.091	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26091-600.pdf
CCSA	CCSA-TSD-TDD-26.091	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 091	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v600
Release 7					
ARIB	ARIB STD-T63-26.091	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26091-700.pdf
CCSA	CCSA-TSD-TDD-26.091	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 091	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v700
Release 8					
ARIB	ARIB STD-T63-26.091	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26091-800.pdf
CCSA	CCSA-TSD-TDD-26.091	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 091	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426091v800
TTA	TTAT.3G-26.091(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.091(R8-8.0.0)

5.3.2.13.46 TS 26.092**AMR speech codec: comfort noise aspects**

This specification describes the detailed requirements for the correct operation of the background acoustic noise evaluation, noise parameter encoding/decoding and comfort noise generation for the AMR speech codec during source controlled rate (SCR) operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.092	3.0.1	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26092-301.pdf
CCSA	CCSA-TSD-TDD-26.092	3.0.1	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 092	3.0.1	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426092U
Release 4					
ARIB	ARIB STD-T63-26.092	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26092-400.pdf
CCSA	CCSA-TSD-TDD-26.092	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 092	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092Uv4
Release 5					
ARIB	ARIB STD-T63-26.092	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26092-500.pdf
CCSA	CCSA-TSD-TDD-26.092	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 092	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v500
Release 6					
ARIB	ARIB STD-T63-26.092	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26092-600.pdf
CCSA	CCSA-TSD-TDD-26.092	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 092	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v600
Release 7					
ARIB	ARIB STD-T63-26.092	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26092-700.pdf
CCSA	CCSA-TSD-TDD-26.092	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 092	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v700
Release 8					
ARIB	ARIB STD-T63-26.092	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26092-800.pdf
CCSA	CCSA-TSD-TDD-26.092	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 092	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426092v800
TTA	TTAT.3G-26.092(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.092(R8-8.0.0)

5.3.2.13.47 TS 26.093

AMR speech codec: source controlled rate (SCR) operation

This specification describes the operation of the AMR speech codec during SCR operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.093	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26093-330.pdf
CCSA	CCSA-TSD-TDD-26.093	3.3.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 093	3.3.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093UR2
Release 4					
ARIB	ARIB STD-T63-26.093	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26093-400.pdf
CCSA	CCSA-TSD-TDD-26.093	4.0.0	Published	Aug 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 093	4.0.0	Published	Aug 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v400
Release 5					
ARIB	ARIB STD-T63-26.093	5.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26093-520.pdf
CCSA	CCSA-TSD-TDD-26.093	5.2.0	Published	Jan 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 093	5.2.0	Published	Jan 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v520
Release 6					
ARIB	ARIB STD-T63-26.093	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26093-610.pdf
CCSA	CCSA-TSD-TDD-26.093	6.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 093	6.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v610
Release 7					
ARIB	ARIB STD-T63-26.093	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26093-700.pdf
CCSA	CCSA-TSD-TDD-26.093	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 093	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v700
Release 8					
ARIB	ARIB STD-T63-26.093	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26093-800.pdf
CCSA	CCSA-TSD-TDD-26.093	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 093	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426093v800
TTA	TTAT.3G-26.093(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.093(R8-8.0.0)

5.3.2.13.48 TS 26.094

AMR speech codec: voice activity detector (VAD)

This specification describes two alternatives for the VAD to be used during SCR operation in conjunction with the AMR codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.094	3.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26094-300.pdf
CCSA	CCSA-TSD-TDD-26.094	3.0.0	Published	Feb 00	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 094	3.0.0	Published	Feb 00	http://pda.etsi.org/pda/home.asp?wkr=DTS/TSGS-0426094U

Release 4

ARIB	ARIB STD-T63-26.094	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26094-400.pdf
CCSA	CCSA-TSD-TDD-26.094	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 094	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094Uv4

Release 5

ARIB	ARIB STD-T63-26.094	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26094-500.pdf
CCSA	CCSA-TSD-TDD-26.094	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 094	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v500

Release 6

ARIB	ARIB STD-T63-26.094	6.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26094-610.pdf
CCSA	CCSA-TSD-TDD-26.094	6.1.0	Published	Jul 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 094	6.1.0	Published	Jul 06	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v610

Release 7

ARIB	ARIB STD-T63-26.094	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26094-700.pdf
CCSA	CCSA-TSD-TDD-26.094	7.0.0	Published	Jun 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 094	7.0.0	Published	Jun 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v700

Release 8

ARIB	ARIB STD-T63-26.094	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26094-800.pdf
CCSA	CCSA-TSD-TDD-26.094	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 094	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426094v800
TTA	TTAT.3G-26.094(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.094(R8-8.0.0)

5.3.2.13.49 TS 26.110**Codec for circuit-switched multimedia telephony service: general description**

This specification describes an introduction to the set of specifications for the support of circuit-switched 3G-324M multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.110	3.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26110-310.pdf
CCSA	CCSA-TSD-TDD-26.110	3.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 110	3.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110UR1
Release 4					
ARIB	ARIB STD-T63-26.110	4.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26110-410.pdf
CCSA	CCSA-TSD-TDD-26.110	4.1.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 110	4.1.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110Uv4
Release 5					
ARIB	ARIB STD-T63-26.110	5.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26110-500.pdf
CCSA	CCSA-TSD-TDD-26.110	5.0.0	Published	Jul 02	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 110	5.0.0	Published	Jul 02	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v500

Release 6

ARIB	ARIB STD-T63-26.110	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26110-600.pdf
CCSA	CCSA-TSD-TDD-26.110	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 110	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v600

Release 7

ARIB	ARIB STD-T63-26.110	7.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26110-700.pdf
CCSA	CCSA-TSD-TDD-26.110	7.0.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 110	7.0.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v700

Release 8

ARIB	ARIB STD-T63-26.110	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26110-800.pdf
CCSA	CCSA-TSD-TDD-26.110	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 110	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426110v800
TTA	TTAT.3G-26.110(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.tta.or.kr/data/tasDown.jsp?where=14688&pk_num=TTAT.3G-26.110(R8-8.0.0)

5.3.2.13.50 TS 26.111**Codec for circuit-switched multimedia telephony service: modifications to ITU-T Recommendation H.324**

This specification describes the modifications applicable to the ITU-T Recommendation H.324, Annex C for the support of circuit-switched 3G_324M multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ARIB	ARIB STD-T63-26.111	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26111-340.pdf
CCSA	CCSA-TSD-TDD-26.111	3.4.0	Published	Feb 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 111	3.4.0	Published	Feb 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111UR3
Release 4					
ARIB	ARIB STD-T63-26.111	4.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26111-400.pdf
CCSA	CCSA-TSD-TDD-26.111	4.0.0	Published	Apr 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 111	4.0.0	Published	Apr 01	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111Uv4
Release 5					
ARIB	ARIB STD-T63-26.111	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26111-510.pdf
CCSA	CCSA-TSD-TDD-26.111	5.1.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 111	5.1.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v510
Release 6					
ARIB	ARIB STD-T63-26.111	6.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26111-620.pdf
CCSA	CCSA-TSD-TDD-26.111	6.2.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 111	6.2.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v620
Release 7					
ARIB	ARIB STD-T63-26.111	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26111-710.pdf
CCSA	CCSA-TSD-TDD-26.111	7.1.0	Published	Jul 08	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 111	7.1.0	Published	Jul 08	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v710

Release 8

ARIB	ARIB STD-T63-26.111	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26111-800.pdf
CCSA	CCSA-TSD-TDD-26.111	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TS 126 111	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTS/TSGS-0426111v800
TTA	TTAT.3G-26.111(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.111(R8-8.0.0)

5.3.2.13.51 TR 26.911**Codec for circuit-switched multimedia telephony service: terminal implementor's guide**

This Report describes non-mandatory Recommendations for the use of the different codec implementation options for the circuit-switched 3G-324M multimedia telephony service based on ITU-T Recommendation H.324, Annex C. These Recommendations address issues specific to the third generation operating environment, including guaranteeing sufficient error resilience and inter-working between terminals.

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Release 99					
ARIB	ARIB TR-T12-26.911	3.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A26911-340.pdf
CCSA	CCSA-TSD-TDD-26.911	3.4.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 126 911	3.4.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v340
Release 4					
ARIB	ARIB TR-T12-26.911	4.2.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A26911-420.pdf
CCSA	CCSA-TSD-TDD-26.911	4.2.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 126 911	4.2.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v420
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ARIB	ARIB TR-T12-26.911	5.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A26911-510.pdf
CCSA	CCSA-TSD-TDD-26.911	5.1.0	Published	Apr 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 126 911	5.1.0	Published	Apr 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v510
Release 6					
ARIB	ARIB TR-T12-26.911	6.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A26911-600.pdf
CCSA	CCSA-TSD-TDD-26.911	6.0.0	Published	Jan 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 126 911	6.0.0	Published	Jan 05	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v600
Release 7					
ARIB	ARIB TR-T12-26.911	7.1.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A26911-710.pdf
CCSA	CCSA-TSD-TDD-26.911	7.1.0	Published	Oct 06	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 126 911	7.1.0	Published	Oct 06	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v710
Release 8					
ARIB	ARIB TR-T12-26.911	8.0.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A26911-800.pdf
CCSA	CCSA-TSD-TDD-26.911	8.0.0	Published	Jan 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 126 911	8.0.0	Published	Jan 09	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0426911v800
TTA	TTAT.3G-26.911(R8-8.0.0)	8.0.0	Approved	Jul 09	http://www.fta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-26.911(R8-8.0.0)

5.3.2.14 Vocabulary

5.3.2.14.1 TR 21.905

Vocabulary

Document 21.905 is a collection of terms, definitions and abbreviations related to the baseline documents defining the objectives and systems framework. This document provides a tool for further work on the technical documentation and facilitates their understanding.

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Release 99					
ARIB	ARIB TR-T12-21.905	3.3.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/R99/A21905-330.pdf
ATIS	T1.3GPP.21.905V330-2002	3.3.0	Approved	May 02	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.905	3.3.0	Published	Oct 01	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 121 905	3.3.0	Published	Oct 01	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905UR3
TTA	TTAE.3G-21.905(R99-3.3.0)	3.3.0	Approved	May 02	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAE.3G-21.905(R99-3.3.0)
TTC	TR-3GA-21.905(R99)v3.3.0	3.3.0	Published	Nov 01	http://www.ttc.or.jp/imt/tr/tr21905r99v330.pdf
Release 4					
ARIB	ARIB TR-T12-21.905	4.5.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel4/A21905-450.pdf
ATIS	T1.3GPP.21.905V450-2004	4.5.0	Approved	May 04	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.905	4.5.0	Published	Jul 03	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 121 905	4.5.0	Published	Jul 03	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v450
TTA	TTAT.3G-21.905(R4-4.5.0)	4.5.0	Approved	May 04	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R4-4.5.0)
TTC	TR-3GA-21.905(Rel4)v4.5.0	4.5.0	Published	Aug 03	http://www.ttc.or.jp/imt/tr/tr21905rel4v450.pdf
Release 5					
ARIB	ARIB TR-T12-21.905	5.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel5/A21905-5a0.pdf
ATIS	ATIS.3GPP.21.905V5100-2006	5.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.905	5.10.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 121 905	5.10.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v5a0
TTA	TTAT.3G-21.905(R5-5.10.0)	5.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R5-5.10.0)
TTC	TR-3GA-21.905(Rel5)v5.10.0	5.10.0	Published	Nov 05	http://www.ttc.or.jp/imt/tr/tr21905rel5v5a0.pdf
Release 6					
ARIB	ARIB TR-T12-21.905	6.10.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel6/A21905-6a0.pdf
ATIS	ATIS.3GPP.21.905V6100-2006	6.10.0	Approved	Apr 06	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.905	6.10.0	Published	Oct 05	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 121 905	6.10.0	Published	Oct 05	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v6a0
TTA	TTAT.3G-21.905(R6-6.10.0)	6.10.0	Approved	Apr 06	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R6-6.10.0)
TTC	TR-3GA-21.905(Rel6)v6.10.0	6.10.0	Published	Nov 05	http://www.ttc.or.jp/imt/tr/tr21905rel6v6a0.pdf

Release 7

ARIB	ARIB TR-T12-21.905	7.4.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel7/A21905-740.pdf
ATIS	ATIS.3GPP.21.905V740-2007	7.4.0	Approved	Oct 07	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.905	7.4.0	Published	Jul 07	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 121 905	7.4.0	Published	Jul 07	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v740
TTA	TTAT.3G-21.905(R7-7.4.0)	7.4.0	Approved	Dec 07	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R7-7.4.0)
TTC	TR-3GA-21.905(Rel7)v7.4.0	7.4.0	Published	Jan 08	http://www.ttc.or.jp/imt/tr/tr21905rel7v740.pdf

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ARIB	ARIB TR-T12-21.905	8.8.0	Approved	Jul 09	http://www.arib.or.jp/IMT-2000/ARIB-STD/ITU-R_Rev9/Rel8/A21905-880.pdf
ATIS	ATIS.3GPP.21.905V880-2009	8.8.0	Approved	Jul 09	https://www.atis.org/docstore/default.aspx
CCSA	CCSA-TSD-TDD-21.905	8.8.0	Published	Apr 09	http://www.ccsa.org.cn/english/tc/files.php?docpath=/ITU-R/M.1457/M.1457-9/TDD/
ETSI	ETSI TR 121 905	8.8.0	Published	Apr 09	http://pda.etsi.org/pda/home.asp?wkr=RTR/TSGS-0121905v880
TTA	TTAT.3G-21.905(R8-8.8.0)	8.8.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R8-8.8.0)
TTC	TR-3GA-21.905(Rel8)v8.8.0	8.8.0	Approved	Jul 09	http://www.ttc.or.jp/imt/tr/tr21905rel8v880.pdf

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TTA	TTAT.3G-21.905(R9-9.1.0)	9.1.0	Approved	Jul 09	http://www.tta.or.kr/data/ttasDown.jsp?where=14688&pk_num=TTAT.3G-21.905(R9-9.1.0)
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5.4 IMT-2000 TDMA single-carrier

5.4.1 Overview of the radio interface

5.4.1.1 Introduction

The IMT-2000 TDMA single-carrier radio interface specifications contain two variations depending on whether a TIA/EIA-41 circuit switched network component or a GSM evolved UMTS circuit switched network component is used. In either case, a common enhanced GSM General Packet Radio Service (GPRS) packet switched network component is used. The initial focus of the following sections has been to provide an evolution path for the TIA/EIA-136 pre-IMT-2000 radio interface to evolve to IMT-2000. As WRC-2000 identified additional frequency bands for IMT-2000, another pre-IMT-2000 radio interface (GSM/GPRS) is provided with an evolution path to TDMA Single-Carrier by incorporating common components of the IMT-2000 TDMA Single-Carrier radio interface. This application furthers the objective of maximum commonality between TIA/EIA-136 and GSM/EDGE GPRS.

5.4.1.1.1 Radio interface used with TIA/EIA-41 circuit switched network component

The IMT-2000 radio interface specifications for TDMA single-carrier technology utilizing the TIA/EIA-41 circuit switched network component are developed by TIA TR45.3 with input from the Universal Wireless Communications Consortium. This radio interface is called Universal Wireless Communication-136 (UWC-136), which is specified by American National Standard TIA/EIA-136. It has been developed with the objective of maximum commonality between TIA/EIA-136 and GSM EDGE GPRS.

This radio interface was designed to provide a TIA/EIA-136 (designated as 136)-based radio transmission technology that meets ITU-R's requirements for IMT-2000. It maintains the TDMA community's philosophy of evolution from 1st to 3rd Generation systems while addressing the specific desires and goals of the TDMA community for a 3rd Generation system.

This radio interface is an attractive and powerful evolutionary step for 136. The technology presented provides for future IMT-2000 services to existing operators, as well as providing new operators competitive features, services and technology. Additionally, the technology provides these same features and services in other bands around the world where regulatory approval has been granted to offer such services.

UWC-136 used a three component strategy for evolving the 136 technology to 3rd Generation. The initial strategy consisted of enhancing the voice and data capabilities of the 30 kHz channels (designated as 136+), adding a 200 kHz carrier (EDGE) component for high-speed data (384 kbit/s) accommodating high mobility (designated as 136HS Outdoor), and adding a 1.6 MHz carrier component for very high-speed data (2 Mbit/s) in low mobility applications (designated as 136HS Indoor). The second phase update further enhanced the voice capabilities of the 30 kHz channel (designated as 136+), and added an additional alternative 200 kHz carrier EDGE component for high speed data (384 kbit/s) (designated as 136EHS).

The third phase update added support for GSM EDGE Release 5 services and the IP multimedia subsystem (IMS) as well as incorporation of the harmonised mobile equipment identifier (MEID). Additionally, an alternative for the circuit switched network component is added. The combined result constituted this radio interface specification.

The fourth phase update added support for GERAN Release 6 services which include multimedia broadcast/multicast service (MBMS), wideband AMR voice coder, and packet switched handoff. Additional improvements include flexible layer one (FLO) and downlink receiver performance.

This update adds support for GERAN Release 7 services which include improved location services utilizing UTDOA and Galileo systems, latency reductions, and conversational services over the A/Gb interface. Additional improvements include dual carrier capability along with enhanced GPRS phase 2 (EGPRS2) which includes higher order modulation, turbo codes, and reduced symbol period. Receiver diversity and generic access network support enhancements are also included.

The 136HS outdoor and indoor components were developed to satisfy the requirements for an IMT-2000 radio transmission technology, with the additional requirement for the consideration of commercially effective evolution and deployment in current 136 networks. Such considerations include flexible spectrum allocation, spectrum efficiency, compatibility with 136 and 136+, and support of macrocellular performance

at higher mobile speeds. 136EHS provided compatibility with GSM EGPRS, while this update provides a common EDGE enhanced GPRS phase 2 packet switched component with GSM EDGE Release 7 functionality thus providing commercially effective evolution and global roaming.

The TDMA community continues to enhance UWC-136, regularly providing revisions to the standards.

5.4.1.1.2 Radio interface used with GSM evolved UMTS circuit switched network component

This radio interface provides an evolution path for an additional pre-IMT-2000 technology (GSM/GPRS) to IMT-2000 TDMA single-carrier. The IMT-2000 radio interface specifications for TDMA single-carrier technology utilizing the GSM evolved UMTS circuit switched network component are developed by 3GPP and transposed by ATIS Wireless Technologies and Systems Committee (WTSC). The circuit switched component uses a common 200 kHz carrier as does the GSM EDGE enhanced GPRS phase 2 packet switched component, as used by 136EHS, to provide high speed data (384 kbit/s). In addition a new dual carrier configuration is supported.

5.4.1.2 Services

UWC-136 builds on the mature and powerful TIA/EIA-136 standard, which has evolved over many years. Thus, all TIA/EIA-136 services are included, and the capabilities of 384 kbit/s, and 2 Mbit/s high-speed data are added. Through TIA/EIA-136, this technology supports both full-rate (3 users/30 kHz) and half-rate (6 users/30 kHz) voice services. Utilizing the GSM evolved UMTS circuit switched network component, all the circuit switched services of the GSM system are provided by TDMA single-carrier. Additionally, the GAIT interoperability function provides interoperability between the two circuit switched networks.

5.4.1.2.1 Voice services

5.4.1.2.1.1 TIA/EIA-41 circuit switched network component

Four full-rate voice coders are presently defined: VSELP, ACELP, US1, and AMR.

Additionally, one half-rate voice coder is presently defined: AMR.

Enhancements to voice services entail a more robust full-rate voice service using DQPSK modulation, and a low delay and improved tandeming codec for wireless office applications using 8-PSK modulation. An additional slot format for DQPSK results in a link budget improvement of 4 dB in robustness for ACELP.

The AMR voice coder supports 3 users per RF carrier (Full Rate) and 6 users per RF carrier (Half-Rate), utilizing slot sharing and enhanced interleaving to achieve diversity gains and lower delay. RF carriers support both DQPSK and 8-PSK modulation formats so that mobiles supporting either modulation can exist on the same carrier to maximize trunking efficiency.

Voice services are supported with robust error correction coding and link quality improvement techniques such as per slot power control. Enhanced reporting mechanisms for FER, real-time *C/I*, and BER are also defined to aid in RF system engineering.

5.4.1.2.1.2 GSM evolved UMTS circuit switched network component

The AMR voice coder supports 8 users per 200 kHz RF carrier (Full Rate) and 16 users per RF carrier (Half-Rate), utilizing the common coding and adaptation technology used in the UWC-136 AMR. This update provides an additional voice coder known as wideband AMR (AMR-WB).

Wideband coding brings quality improvement over the existing narrowband telephony through the use of extended audio bandwidth. The AMR codec, standardised for Release 98 and Release 99, provides good performance for telephone bandwidth speech (audio bandwidth limited to 3.4 kHz). However, the introduction of a wideband speech service (audio bandwidth extended to 7 kHz) brings improved voice quality especially in terms of increased voice naturalness. Wideband coding brings speech quality exceeding wireline quality to GERAN systems.

The wideband codec was developed as a multi-rate codec consisting of several codec modes like the AMR codec. Consequently, similar to the existing AMR codec, in the AMR-WB codec, the codec mode is chosen based on the operating conditions on the radio channel. Adapting coding depending on the channel quality provides high robustness against transmission errors. The codec also includes a source controlled rate

operation mechanism, which allows it to encode speech at a lower average rate by taking into account speech inactivity.

The AMR-WB codec provides the following capabilities:

- Voice quality equal to ITU-T Recommendation G.722-56K in a GSM full-rate traffic channel.
- Voice quality equal to ITU-T Recommendation G.722-64K in a GERAN 8-PSK Radio Channel.

The codec mode can be changed every 40 ms in GERAN channels.

Extended AMR Wideband codec

This update adds an extension to the AMR-WB codec which adds the detailed mapping from input blocks of monophonic or stereophonic audio samples in 16 bit uniform PCM format to encoded blocks and from encoded blocks to output blocks of reconstructed monophonic or stereophonic audio samples. The coding scheme is an extension of the AMR-WB coding scheme and is referred to as extended AMR-WB or AMR-WB+ codec. It comprises all AMR-WB speech codec modes including VAD/DTX as well as extended functionality for encoding general audio signals such as music, speech, mixed, and other signals. AMR-WB+ extends the AMR-WB codec by adding transform coded excitation (TCX), bandwidth extension, and stereo.

The AMR-WB+ audio codec processes input frames equal to 2 048 samples at an internal sampling frequency F_s . The internal sampling frequency is limited to the range 12 800-38 400 Hz. The 2 048-sample frames are split into two critically sampled equal frequency bands. This results in two superframes of a 1 024 samples corresponding to the low frequency (LF) and high frequency (HF) band. Each superframe is divided into four 256-samples frames. Sampling at the internal sampling rate is obtained by using a variable sampling conversion scheme, which re-samples the input signal.

The LF and HF signals are then encoded using two different approaches: the LF is encoded and decoded using the “core” encoder/decoder, based on switched ACELP and transform coded excitation (TCX). In ACELP mode, the standard AMR-WB codec is used. The HF signal is encoded with relatively few bits (16 bits/frame) using a bandwidth extension (BWE) method.

Enhanced aacPlus general audio codec

This update adds an additional codec known as the enhanced advanced audio coding plus (aacPlus) general audio codec. The enhanced aacPlus audio codec is based on the advanced audio coding (AAC), spectral band replication (SBR) and parametric stereo coding tools defined in the MPEG-4 Audio standard. In addition it includes further tools such as error concealment, spline resampler, and stereo-to-mono downmix. Also described is the detailed mapping from a PCM sample input to an MPEG-4 bitstream containing enhanced aacPlus coded audio.

5.4.1.2.2 Data services

A scalable packet data service having data rates from 11.2 kbit/s to greater than 2 Mbit/s is supported. For 136+, 136HS Outdoor, and 136HS Indoor, this packet data service is referred to as GPRS-136. For 136EHS this packet data service is referred to as EGPRS-136. Both use the GPRS backbone network. Packet-switched services are integrated with existing circuit-switched services while maintaining TIA/EIA-136 capabilities. A mobile station in operation on the packet network may automatically move to the circuit network to place and receive calls, then return to the packet network upon completion of a circuit call. Mobile stations in operation on the packet network are also able to support services such as short message service (SMS) and message waiting indications.

The user can access two forms of data network; X.25 and Internet protocol (IP)-based. For IP-based networks the user may have dynamic or static IP allocation. Differing QoS requirements are supported for any data session and multiple simultaneous data sessions are supported. Only the user's subscription and system engineering limit the number of data sessions that are open for a user. The general approach of this integrated data model is to overlay the circuit-switched network nodes with packet data network nodes for service provisioning, registration, mobility management, and accounting. Interworking is provided between the circuit-switched and packet data networks for mobiles capable of both services. This allows a user engaged in an active data transfer to pause/ resume operation should they wish to make or receive a circuit call.

Conversational services

Conversational services are used for real-time applications, such as IP-telephony (VoIP) and video-conferencing. Support for conversational services is necessary to maintain compatibility with legacy systems and should be implemented with a minimum of impact to existing systems and standards. This requires maintaining the current functional split of the protocol architecture between the core and radio access network. Implementing conversational services in the PS domain in A/Gb mode requires consideration of the following GERAN packet service characteristics:

- Minimizing the transfer delay between the SGSN and the MS.
- Improving the feedback reporting mechanism.
- Defining a suitable RLC mode to allow retransmissions for delay-sensitive applications.
- Defining radio resource management functions to efficiently support Conversational Services.

For instance, conversational services need a reduced transfer delay and a fast acknowledgement procedure over the radio interface. In addition, support of Packet-switched Handover for GERAN A/Gb mode is a prerequisite to achieve support for conversational services.

5.4.1.2.3 Ancillary services

A host of services are offered, some of which are: portable subscriptions through removable user identity modules (R-UIM), short messaging, message waiting indication, calling name indication, extended standby time via sleep mode, wireless office (private systems), circuit-switched data, over-the-air activation, over-the-air programming, encryption, broadcast teleservice transport, general UDP transport, and authentication.

The second update also provided location services capabilities through system assisted mobile positioning through satellite (SAMPS).

The third phase update added a rich broadcast or point to multipoint service known as multimedia broadcast/multicast service (MBMS). Point to multipoint services exist today which allow data from a single source entity to be transmitted to multiple endpoints. MBMS efficiently provides this capability for such broadcast/multicast services provided by the home environment and other value added service providers (VASPs).

The MBMS is a unidirectional point to multipoint bearer service in which data is transmitted from a single source entity to multiple recipients. It will also be capable of expanding to support other services with these bearer capabilities.

It will support two modes of operation:

- the broadcast mode;
- the multicast mode.

MBMS broadcast mode

MBMS data transmission will adapt to different RAN capabilities or different radio resource availability, e.g. by reducing the bitrate of the MBMS data.

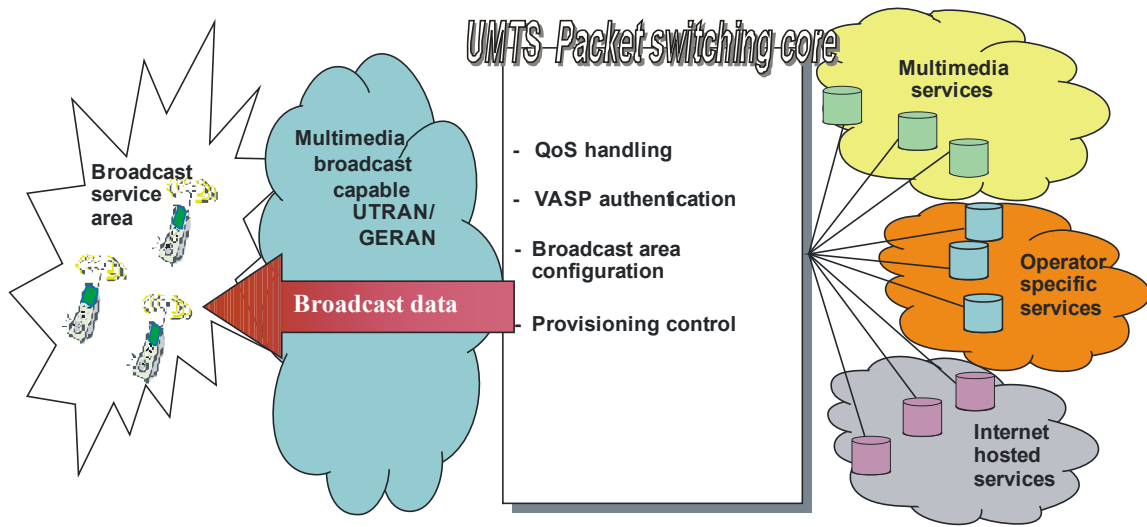
Figure y gives an example of how a network can be configured to broadcast a variety of high bit rate services to users within the associated broadcast service area.

A broadcast service received by the MS, involves one or more successive broadcast sessions. A broadcast service might, for example, consist of a single on-going session (e.g. a media stream) or may involve several intermittent sessions over an extended period of time (e.g. messages).

An example of a service using the broadcast mode could be advertising or a welcome message to the network. As not all users attached to the network may wish to receive these messages then the user shall be able to enable/disable the reception of these broadcast service on his MS.

FIGURE 56

Example of MBMS broadcast mode network



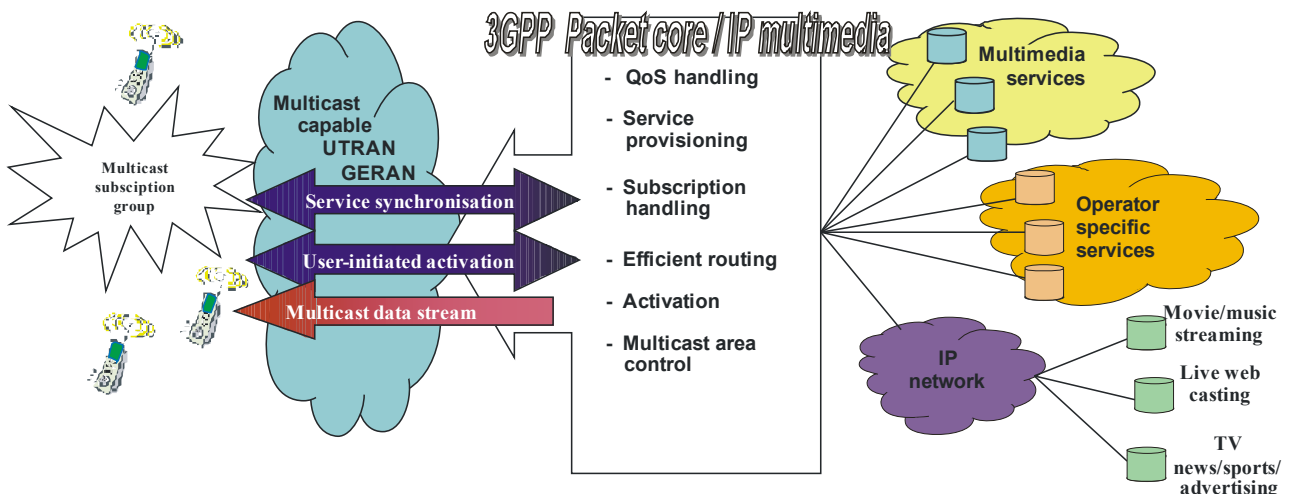
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MBMS multicast mode

The multicast mode allows the unidirectional point-to-multipoint transmission of multimedia data (e.g. text, audio, picture, video) from a single source point to a multicast group in a multicast service area. The multicast mode will efficiently use radio/network resources e.g. data is transmitted over a common radio channel. Data is transmitted in the multicast service area as defined by the network (Home environment). In the multicast mode there is the possibility for the network to selectively transmit to cells within the multicast service area which contain members of a multicast group.

FIGURE 57

Example of MBMS Multicast Mode Network



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MBMS data transmission will adapt to different RAN capabilities or different radio resource availability, e.g. by reducing the bitrate of the MBMS data.

A multicast service received by the MS, involves one or more successive multicast sessions. A multicast service could, for example, consist of a single on-going session (e.g. a multimedia stream) or may involve several intermittent multicast sessions over an extended period of time (e.g. messages).

An example of a service using the multicast mode could be a football results service for which a subscription is required.

Unlike the broadcast mode, the multicast mode generally requires a subscription to the multicast subscription group and then the user joining the corresponding multicast group. The subscription and group joining may be made by the operator, the user or a third party on their behalf (e.g. company).

Reception of multicast services cannot be guaranteed over the access network. For many applications and services guaranteed data reception may be carried out by higher layer services or applications which make use of MBMS.

Multicast mode should allow terminals to minimise their power consumption.

Multicast mode shall be inter-operable with IETF IP Multicast. This will allow the best use of IP service platforms to help maximize the availability of applications and content so that current and future services can be delivered in a more resource efficient manner. Figure 57 above shows a general high level overview of multicast mode network.

Location Services Enhancements

The 3GPP GERAN specifications include support for various location technologies, such as Cell-ID, E-OTD and A-GPS positioning. Following the decision from the European Union to develop the GALILEO Global Navigation Satellite System, it was decided to add support for GALILEO in 3GPP GERAN Release 7 specifications. GALILEO will consist of a constellation of 30 satellites in three orbit planes. It is based on the same technology as GPS and provides a similar degree of precision. Using GPS and GALILEO constellations together provides real advantage in terms of accuracy, service availability and reliability, since essentially twice the number of satellites with interoperable signals will be available for position calculation and navigation. In addition, GALILEO specific signal characteristics (e.g., new modulation formats and dataless ranging channels) are expected to bring themselves significant enhancements. Consequently, 3GPP introduced the concept of assisted global navigation satellite system (A-GNSS) in Release 7. In this concept, different global navigation satellite systems (GNSS) (currently GPS and GALILEO) can be used separately or in combination to perform the location of a mobile station. GALILEO support has been added to Release 7 specifications in such a way, that additional global navigation satellite systems can be added in the future without requiring major changes to the specifications. The concept of GANSS (GALILEO and additional navigation satellite systems) has been introduced by defining GANSS common assistance data (applicable to any GNSS) and GANSS specific assistance data. The GANSS specific assistance data are identified by a certain GANSS-ID. Currently, GANSS includes support for GALILEO only. In the future, additional GANSS-IDs may be defined for additional constellations and the GANSS specific assistance data formats may be used for these additional GNSS in the future as well. Hence, the Assisted-GNSS concept combines Assisted-GPS (defined since Release 98) and Assisted-GANSS (new defined in Release 7). All interfaces supporting the transport of information for localization have been modified to incorporate the transport of the new GANSS elements.

Support for GNSS Extended Orbits:

In order to compute a location in the MS based on GNSS (GPS and GANSS) signal measurements, the MS must determine with good precision the position and clock bias of the GNSS satellites. For that purpose navigation model assistance (ephemeris and clock corrections) are delivered to the MS in assistance data information elements. The navigation model assistance (as also provided in the broadcast message of each individual GNSS satellite) usually has a lifespan of four hours. There are various commercial services available that produce satellite ephemeris and clock corrections predictions with extended lifespan of several days. GERAN Release 7 includes the option to extend the satellite orbits beyond that provided by the individual GNSS. Extended navigation model assistance can be provided for the all satellites in a GNSS constellation with a validity period of typically between 1 and 7 days in advance. The MS may download the extended orbit data regularly (e.g., once a week) and therefore, valid navigation model assistance data would already be available in the MS when it receives a position request from the network. This usually also

reduces the time to report a location estimate since most data required to calculate a location in the MS would already be available in the MS. In addition, extended orbits enable A-GNSS like benefits outside network/service coverage as ephemeris data for the full constellation may be already available in the MS, and hence, can achieve faster time to first fix with greater sensitivity than otherwise possible with standalone GNSS receivers.

Since the data needed to describe ephemeris and clock corrections for a period of e.g., 7 days is rather huge, the navigation model data is differentially encoded before delivered to the MS. The orbit data are divided into periods of 4-6 h, and the difference between adjacent orbit model data are sent to the MS. This compression technique reduces the message size of the extended orbit data significantly.

Support for extended orbits has been added for GPS and GANSS.

5.4.1.3 Layer 1

The basic premise of operation is spectrum on demand. The amount of spectrum allocated at a given time is a function of the service mix that is required. It allows for incremental channels to be allocated and de-allocated as required. The bandwidth associated with each service is tailored to that service. By aggressively managing the spectrum, high spectral efficiency performance is supported as well as underlay cells which can steal spectrum from the overlay network to provide even more capacity in a given geographical region.

The 136+ bearer supports both voice and data service on a 30 kHz RF channel. Two modulation types are specified: mandatory $\pi/4$ -DQPSK and optional 8-PSK at a common channel symbol rate of 24.3 ksymbols/s. Channels are spaced 30 kHz apart, centre to centre. Both the voice and data services can operate on either modulation to allow for service differentiation and channel robustness.

EDGE Bearer

The 136HS Outdoor bearer and the 136EHS bearer uses a 200 kHz RF carrier, known as EDGE, to enable the deployment of the high-speed data services. Two mandatory modulations are specified: GMSK and 8-PSK at a common channel symbol rate of 270.833 ksymbols/s. The channel coding and modulation can be varied to provide an optimal adaptation of throughput versus channel robustness. Channels are spaced 200 kHz apart, centre to centre.

Dual Carrier Configuration

In this update, which adds GERAN Release 7 functionality, two 200 kHz carriers are supported in the mobile station which is known as “Downlink Dual Carrier”. In a downlink dual carrier configuration, one or more PDCHs are assigned to a single MS on each of two different radio frequency channels on either the uplink or downlink, or both. On the downlink, radio blocks may be allocated on both radio frequency channels in any radio block period. On the uplink, radio blocks shall not be allocated on both radio frequency channels in the same radio block period.

A downlink dual carrier configuration shall support multislot configurations either for packet switched connections or dual transfer mode. For a Dual Transfer Mode capable MS which supports Downlink Dual Carrier, support of Downlink Dual Carrier configurations for Dual Transfer Mode is optional.

EGPRS Phase 2 Bearers

Release 7 of the Evolved GERAN also added Downlink and Uplink physical layer enhancements collectively referred to as Enhanced GPRS Phase 2 (EGPRS2). Specifically, they introduce higher order modulations (16 & 32-QAM) to improve spectral efficiency; higher symbol rate ($1.2 \times$ the legacy symbol rate) to increase peak data rates and turbo coding to improve link performance. In order to facilitate a phased deployment of these features, various levels are defined. For example, EGPRS2 Downlink Level-A standardizes 16 & 32-QAM and turbo coding, whereas EGPRS2 Downlink Level -B additionally includes higher symbol rate (as well as QPSK modulation). Similarly, EGPRS2 Uplink Level-A standardizes 16-QAM, whereas EGPRS Uplink Level-B additionally includes 32-QAM as well as Higher Symbol Rate. In order to accommodate the transmission of a higher symbol rate, a spectrally wide pulse shaping filter is also defined for the uplink and is being explored for the downlink.

Downlink advanced receiver performance (DARP)

In addition to the modulation and coding changes, downlink advanced receiver performance (DARP) is introduced. DARP is the new project name for single antenna interference cancellation (SAIC) for GERAN networks. This feature improves the link level performance and thereby the radio network capacity (spectral efficiency) for GMSK modulated circuit switched voice and packet data services (EGPRS MCS1-4) when operating in areas being limited by GMSK interference. The conclusion of the Feasibility Study is that DARP is indeed a very viable and feasible technology, and that when applied to GMSK modulation and fully deployed, will provide significant gains in voice capacity in interference-limited networks, both synchronous and asynchronous. In addition, DARP was also found to support modest increases in GPRS data throughput for the data traffic models considered. Another key conclusion is that the capacity gain due to DARP is not linearly related to DARP terminal penetration. Hence, for low to moderate terminal penetration rates, DARP is expected to provide its primary benefit in terms of immediate improvement in call quality (and GPRS throughput), with the secondary benefit of modest system capacity gain. For high terminal penetration rates (>70-80%), DARP is expected to provide both, improvement in call quality as well as large gain in overall system capacity.

Downlink advanced receiver performance Phase II

The feasibility of MS receive diversity (MSRD) was determined during the feasibility study for evolved GSM/EDGE radio access network (see § 5.4.2.5.46).

MSRD is a downlink feature, which improves the receiver performance of the mobile station by means of an additional antenna. The introduction of single antenna interference cancellation (SAIC) characterised by the downlink advanced receiver performance (DARP) Phase I has shown that receiver enhancements in the MS can provide significant gains in terms of spectral efficiency. MSRD offers the possibility of enhanced channel diversity and the potential for further improved interference cancellation performance for GMSK modulated signals as well as significant gains for 8-PSK-modulated signals. Therefore gains in both user throughput and system capacity can be achieved.

Finally, the 136HS indoor bearer uses a 1.6 MHz RF carrier to enable the deployment of high-speed indoor data services at greater than 2 Mbit/s. Two mandatory modulations are specified: B-O-QAM and Q-O-QAM at a common channel symbol rate of 2.6 Msymbols/s. The channel modulation can be varied to provide an optimal adaptation of throughput versus channel robustness. Channels are spaced 1 600 kHz apart, centre to centre.

Flexible Layer One

In the third phase update, a new logical mapping was introduced known as Flexible Layer One. Previously, the MAC sublayer was responsible for the mapping between the logical channels (traffic or control channels) and the basic physical channels. The logical channels are the channels the physical layer offers to the MAC sublayer. Until now these logical channels and the mapping to the basic physical channel have been fully specified statically.

A different approach has been taken in UTRAN, where instead of providing logical channels the physical layer offers Transport Channels (TrCH), which can be used by the MAC sublayer. A transport channel is used to transmit one data flow with a given QoS over the radio interface. A number of transport channels can be active at the same time and multiplexed at the physical layer. The transport channels are configured at call setup by the network.

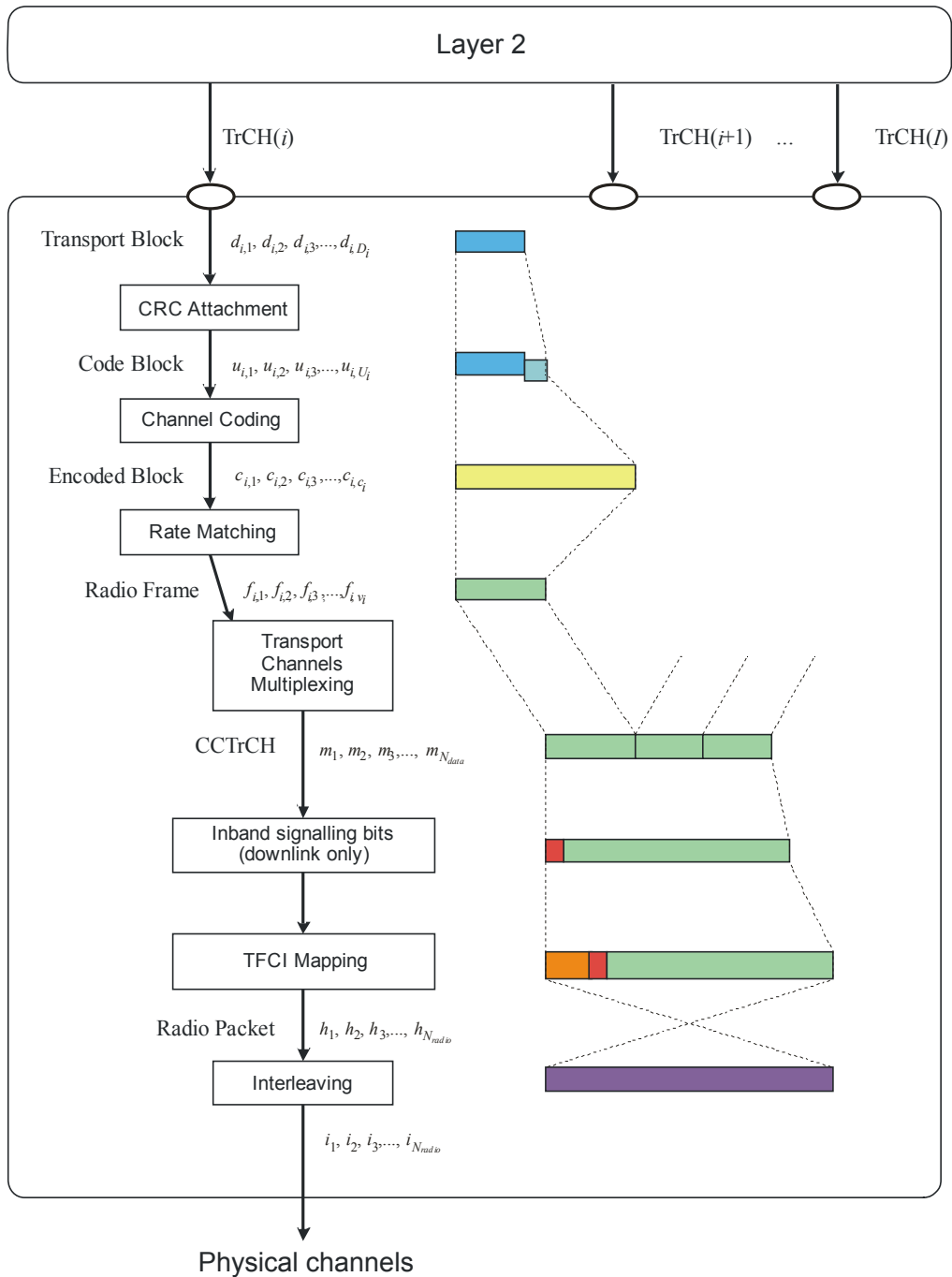
With the Flexible Layer One addition, the concept of transport channels used in UTRAN is reused in GERAN i.e. the physical layer offers one or several transport channels to the MAC sublayer.

With Flexible Layer One, the physical layer of GERAN offers one or several transport channels to the MAC sublayer. Each of these transport channels can carry one data flow providing a certain Quality of Service (QoS). A number of transport channels can be multiplexed and sent on the same basic physical subchannel at the same time. This is illustrated in the Fig. 58.

The configuration of a transport channel i.e. the number of input bits, channel coding, interleaving etc. is denoted the Transport Format (TF). As in UTRAN, a number of different transport formats can be associated to one transport channel. The configuration of the transport formats is completely controlled by the RAN and

signalled to the MS at call setup. In both the MS and the BTS, the transport formats are used to configure the encoder and decoder units. When configuring a transport format, the RAN can choose between a number of predefined CRC lengths and block lengths.

FIGURE 58
Flexible layer one architecture



On transport channels, transport blocks (TB) are exchanged between the MAC sublayer and the physical layer on a transmission time interval (TTI) basis. For each TTI a transport format is chosen and indicated through the transport format indicator (TFIN). In other words, the TFIN tells which transport format to use for that particular transport block on that particular TrCH during that particular TTI. When a transport channel is inactive, the transport format with a transport block size of zero (empty transport format) is selected.

Only a limited number of combinations of the transport formats of the different TrCHs are allowed. A valid combination is called a transport format combination (TFC). The set of valid TFCs on a basic physical subchannel is called the transport format combination set (TFCS). The TFCS is signalled through the calculated transport format combinations (CTFC).

5.4.1.4 Layer 2

Layer 2 provides two different types of functionalities: those to support circuit-based operation and those that support packet-based operation.

5.4.1.4.1 Circuit

The modulated/encoded voice is carried over the digital traffic channel (DTC). The connection of the traffic channel is supervised using the coded digital verification colour code (CDVCC) on Layer 2. The mobile station (MS) decodes the CDVCC (either explicitly or implicitly) received from the base station in every DTC time slot, and compares it with the colour code received from the original connection messages or the hand-off message (DVCCs). The MS transmits the CDVCCs to the base station in each burst. The DTC also contains fast and slow associated control channels (FACCH and SACCH) which carry control and supervising messages.

Layer 2 of the digital control channel (DCCH) services requests from and provides indications to Layer 3. On the MS side, Layer 2 services the Layer 3 reverse DCCH (RDCCH) request primitive to initiate a mobile station access attempt on the random access channel (RACH) which is controlled by Layer 2. Layer 2 then performs random or reserve access procedures, and decoding of the shared channel feedback (SCF) status information. Layer 2 issues a forward DCCH (FDCCH) indication primitive to Layer 3 when the MS receives a complete Layer 3 message broadcast or addressed on various FDCCH channels.

On the base station side, Layer 2 services the Layer 3 F-BCCH, E-BCCH, S-BCCH, and SPACH request primitives containing the Layer 3 messages to be sent to the MS. Layer 2 issues an RDCCH indication primitive to deliver to Layer 3 messages received from the MS.

Various Layer 2 protocols can be used to carry RDCCH and FDCCH information in support of Layer 3 messages such as frame segmentation and re-assembly, and ARQ mode of operation. Other functions of the DCCH Layer 2 are: message concatenation of Layer 3 messages, MSID management, header formatting, and monitoring radio link quality (MRLQ).

5.4.1.4.2 Packet

The overall function Layer 2 provides is to realize radio bearers for Layer 3, taking into consideration the requested QoS objectives. Layer 2 is structured into logical link control (LLC), radio link control (RLC), and medium access control (MAC) (RLC and MAC may be combined into one function referred to as MAC).

The LLC is independent of the radio interface. The LLC provides acknowledged or unacknowledged data transfer, and provides support to the Tunneling Of Message sub-layer allowing for TIA/EIA-41 signaling over the packet bearer.

Three separate MAC entities may be included in a single Layer 2 MAC, one entity to support each type of bearer: 136+ bearer, 136HS Outdoor bearer or 136EHS bearer and 136HS Indoor bearer. The main task of the MAC is to dynamically multiplex the radio resource so that the RF resources can be efficiently utilized among multiple users with minimal packet collisions. The MAC supports both an unacknowledged and an acknowledged mode. In acknowledged mode, the MAC is responsible for sequenced delivery of packets to the higher layers, and an error recovery method using a sliding window automatic repeat request is utilized. The MAC also supports transactions with different priorities, and provides QoS information with four levels

of priority. This radio interface also supports several unique design features such as implicit addressing and active mobile identity management which provide link quality robustness, and resource efficiency.

The reason why RLC and MAC are considered as belonging to the same sub-layer is that both entities have direct access to the physical layer and the LLC sub-layer. Furthermore, the LLC protocol does not depend on the radio interface, whereas the RLC/MAC protocol is radio specific.

This update adds the GERAN Release 7 functionality of latency reduction for both ideal and non-ideal radio conditions. This latency reduction will make it possible to provide services that are not otherwise feasible in GERAN (e.g. VoIP, gaming, etc.). The reduction is split into two parts, improved Ack/Nack reporting and reduced TTI (transmission time interval). The improved Ack/Nack reporting will enable a faster reporting scheme based on sending the data on the RLC data block. This also includes a requirement for a reduction of the MS reaction time to transmit the report and to retransmit a block of data. The reduced TTI method involves using transmission times as low as 10 ms on the radio interface as compared to 20 ms for legacy systems.

5.4.1.5 Layer 3

Layer 3 provides two different types of mobility and resource management functionalities: those to support circuit-based operation and those that support packet-based operation.

136 mobility management and radio resource management entities at Layer 3 provide circuit-switched services. Layer 3 procedures (known as intelligent roaming) are defined to provide the user access to the optimum circuit-switched service provider. Once the initial control channel selection has been accomplished, cell re-selection and handoff algorithms provide continuity of service. The cell re-selection algorithms include several trigger conditions and selection criteria to provide versatile management capability.

The GSM-based GPRS mobility management function and the 136 mobility management function, operating in parallel, comprise the GPRS-136 mobility manager for GPRS-136. The GSM based EGPRS mobility management function and the 136 mobility management function, operating in parallel, comprise the EGPRS-136 Mobility Manager for EGPRS-136. The packet mobility management function provides packet data mobility management, while the 136 mobility management function provides circuit-switched service mobility management. Together they ensure that the network knows the current location of MS.

The packet radio resource management (RRM) entity is similar to the DCCH procedures that control voice resources. The main task of the RRM is to dynamically allocate the radio resource among the bearers so that the RF resources can be efficiently utilized among multiple users. Procedures are defined which will spread the load across multiple packet channels in a given cell. Techniques are outlined that allow for rapid finding of packet resources. Continuity of service is supported via cell re-selection as a mobile traverses multiple cells. The packet RRM supports all three packet data bearers defined in this radio interface.

In the third phase update, packet switched handover was added. The packet switched handover procedure is used to handover an MS with one or more packet flows from a source cell to a target cell. The source and target cells can be located within either the same BSS (Intra BSS HO), different BSSs within the same SGSN (Intra SGSN HO) or belonging to different SGSNs (Inter SGSN HO), or systems with different radio access types (Inter RAT HO, Inter mode HO). Handover is network controlled and mobile assisted.

While the MS is still in the source cell:

- Radio resources in the target cell are allocated and signalled to the MS.
- System information of the target cell needed for access in the target cell is signalled to the MS.

In addition to the management functions Layer 3 provides other capabilities. Layer 3 message construction rules provide backwards compatibility so that a MS or base station can process a message to the extent it understands it. This capability also allows new functions to be easily added for extensibility.

Layer 3 provides a generic R-DATA transport that can function in point-to-point or broadcast mode. This R-DATA transport can carry various teleservice messages without regard to the exact using entity. This generic capability allows various value-added services such as short message services and over-the-air programming to be defined or added to using the common transport.

5.4.1.6 Network

A system is realized by uniquely combining a TDMA single-carrier radio interface with an EDGE enhanced GPRS or an EGPRS2 packet switched network component combined with either a TIA/EIA-41 circuit switched network component or a GSM evolved UMTS circuit switched network component.

TIA/EIA-41 Circuit Switched Network component

Figure 60 presents the network elements and the associated reference points that comprise a system utilizing the TIA/EIA-41 circuit switched network component. The primary TIA/EIA-41 network node visible to the serving GPRS support node (SGSN) is the gateway mobile switching center (MSC)/visitor location register (VLR). The interface between the TIA/EIA-41 gateway MSC/VLR and the SGSN is the Gs' interface, which allows the tunnelling of TIA/EIA-136 signalling messages between the MS and the gateway MSC/VLR. The tunnelling of these signalling messages is performed transparently through the SGSN. Between the MS and the SGSN, the signalling messages are transported using the tunnelling of messages (TOM) protocol layer. TOM uses the LLC unacknowledged mode procedures to transport the signalling messages. Between the SGSN and the gateway MSC/VLR, the messages are transported using the BSSAP+ protocol.

Upon receiving a TIA/EIA-136 signalling message from a MS via the TOM protocol, the SGSN forwards the message to the appropriate gateway MSC/VLR using the BSSAP+ protocol. Upon receiving a TIA/EIA-136 signalling message from a gateway MSC/VLR via the BSSAP+ protocol, the SGSN forwards the message to the indicated MS using the TOM protocol.

Mobile Stations supporting both the TIA/EIA-41 circuit switched network component and packet services (Class B136 MS) perform location updates with the circuit system by tunnelling the Registration message to the gateway MSC/VLR. When an incoming call arrives for a given Mobile Stations, the gateway MSC/VLR associated with the latest registration pages the Mobile Stations through the SGSN. The page can be a hard page (no Layer 3 information included in the message), in which case, the Gs' interface paging procedures are used by the MSC/VLR and the SGSN. If the circuit page is not for a voice call or, if additional parameters are associated with the page, a Layer 3 page message is tunnelled to the Mobile Stations by the MSC/VLR. Upon receiving a page, the Mobile Stations pauses the packet data session and leaves the packet data channel for a suitable DCCH. Broadcast information is provided on the packet control channel to assist the Mobile Stations with a list of candidate DCCHs. Once on a DCCH, the Mobile Stations sends a page response. The remaining call setup procedures, such as traffic channel designation, proceed as in a normal page response situation.

The signalling plane between a MS and the gateway MSC/VLR VLR for the TIA/EIA-41 circuit switched network component is shown in Fig. 62.

GSM evolved UMTS Circuit Switched Network component

Figure 61 presents the network elements and the associated reference points that comprise a system utilizing the GSM evolved UMTS circuit switched network component along with the common GSM EDGE enhanced GPRS or EGPRS2 packet switched component.

Since the TDMA-SC network supports a common EDGE 136EHS bearer connected to a core enhanced GPRS backbone network or a GSM EDGE radio access network, along with either circuit switched component, GSM EDGE Release 5, Release 6 and Release 7 mobile stations and functions are supported. In addition to the Gs interface, GSM SMS functionality is also supported through the Gd interface.

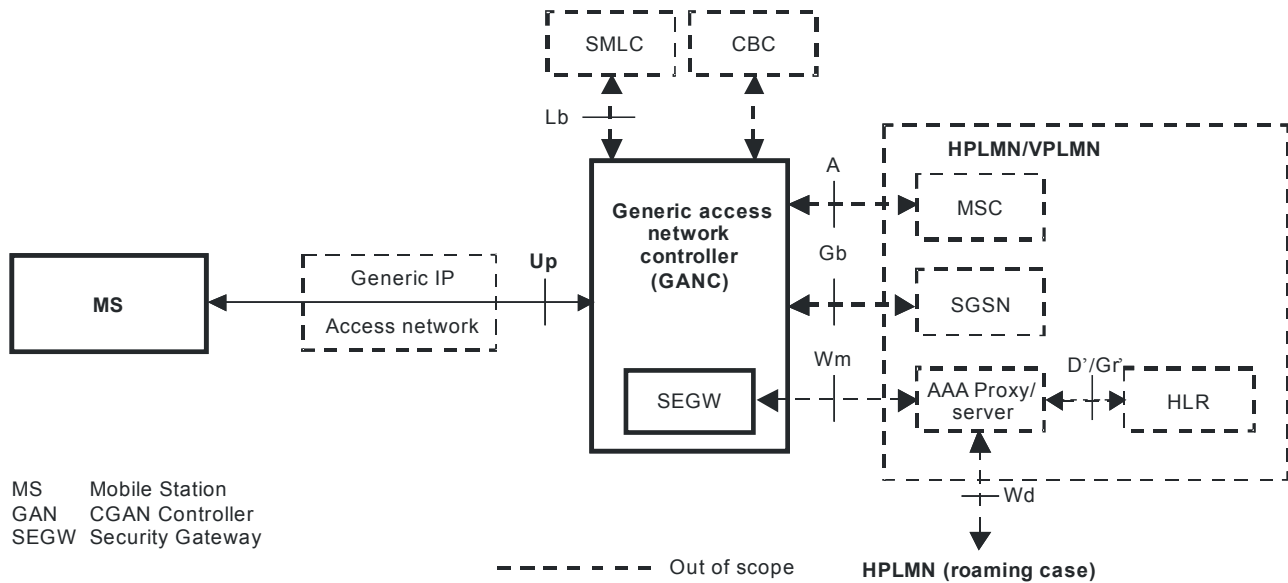
Generic Access Network

GERAN Release 6 introduced Generic Access to the A/Gb interfaces, or GA, which is an extension of GSM/GPRS mobile services that is achieved by tunnelling Non Access Stratum (NAS) protocols between the MS and the Core Network over an IP network. GA is a complement to traditional GSM/GPRS/UTRAN radio coverage.

The Generic Access Network functional architecture is illustrated in Fig. 59.

FIGURE 59

GAN functional architecture



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The main components of the GAN architecture are a Mobile Station with enhanced functionality and the Generic Access Network Controller (GANC). The GANC appears to the core network as a GERAN Base Station Subsystem (BSS). It includes a Security Gateway (SEGW) that terminates secure remote access tunnels from the MS, providing mutual authentication, encryption and data integrity for signalling, voice and data traffic.

A Generic IP Access network provides connectivity between the MS and the GANC. The IP transport connection extends from the GANC to the MS. A single interface, the Up interface, is defined between the GANC and the MS.

GAN provides co-existence with the GSM/GPRS radio access network (GERAN) and interconnection with the core network (CN) via the standardized interfaces defined for GERAN A/Gb mode (A-interface for circuit switched services and Gb-interface for packet switched services). In addition, the Lb-interface provides support for location services and CBC-BSC interface supports cell broadcast services.

Transaction control (e.g. CC, SM) and user services are provided by the core network (e.g. MSC/VLR and the SGSN/GGSN).

Use of AAA server over the Wm interface is used to authenticate the MS when it sets up a secure tunnel. Note that only a subset of the Wm functionalities is required for the GAN application. As a minimum the GANC-SEGW shall support the Wm authentication procedures.

Indication of support for PS Services and of support for DTM is provided through appropriate signalling to the MS.

Enhancements to GAN provided in GERAN Release 7 with this update are Seamless mobility for CS and for PS which includes real time conversational services (no disruption to downloads along with low latency and handover interruption). Transparent support for all services between UTRAN or GERAN, and GAN is provided along with reduced complexity for delivery of CS and PS services and transport efficiencies. Power consumption for the MS is also reduced.

FIGURE 60
Network elements and associated reference points

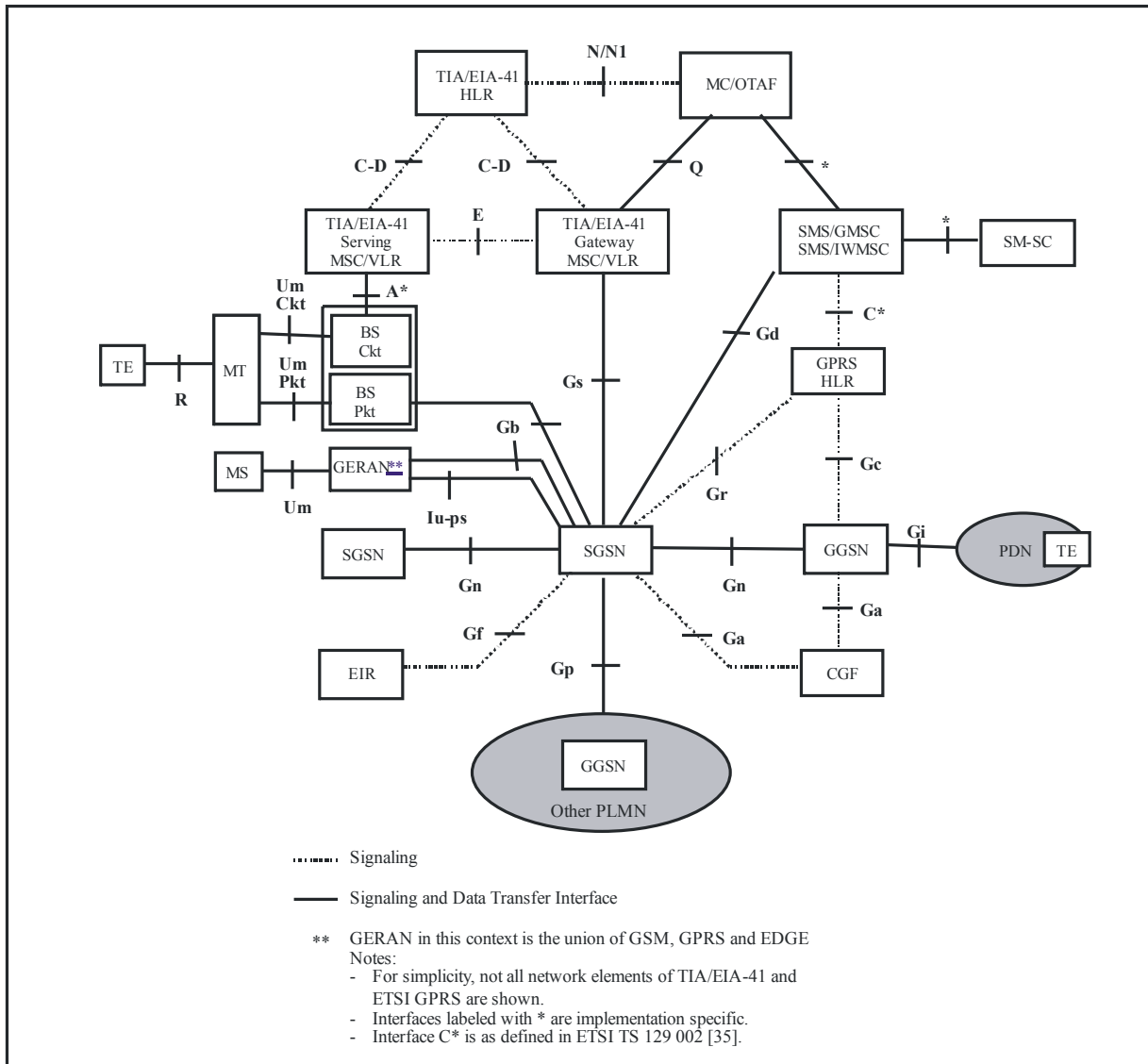
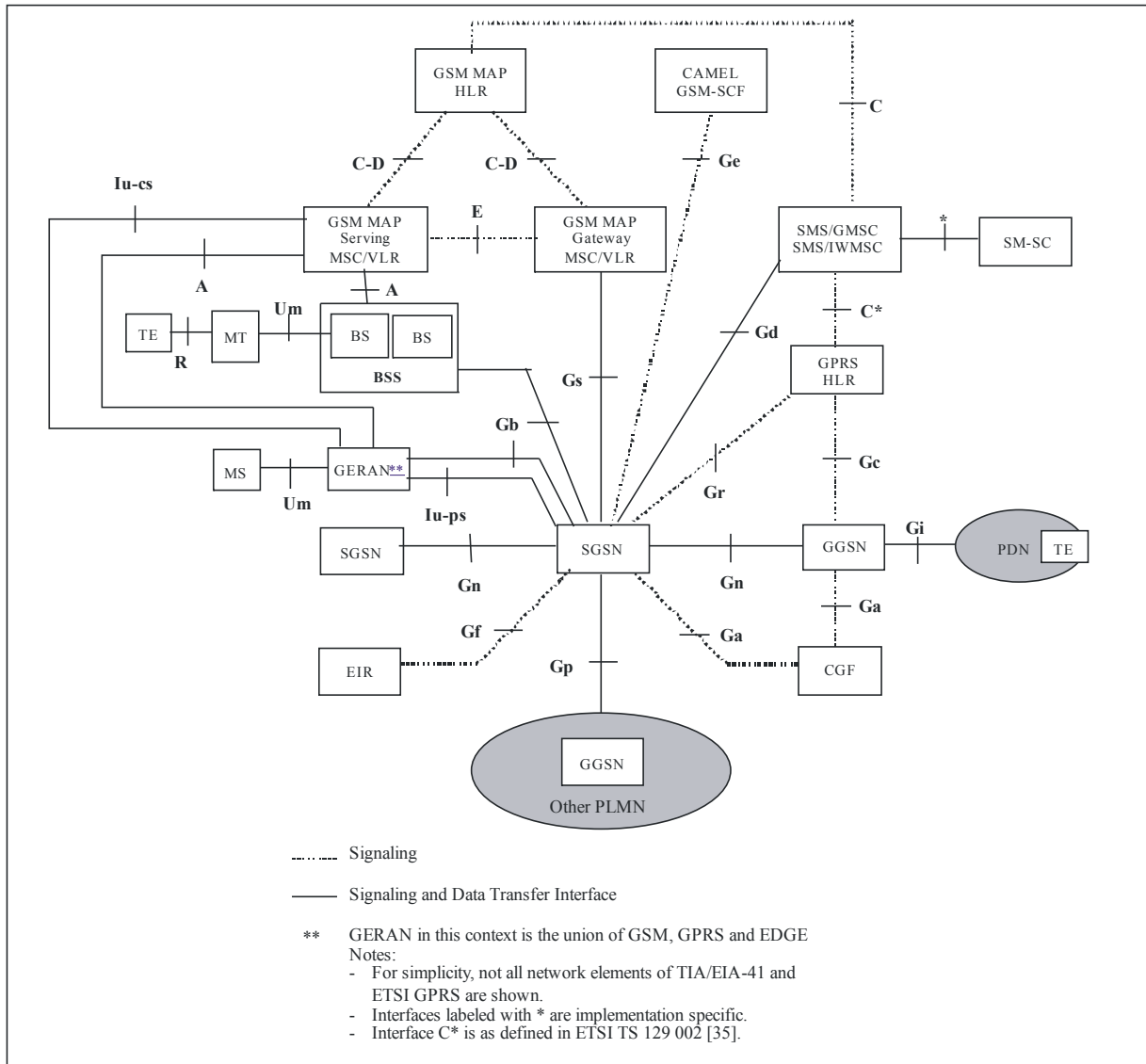


FIGURE 61

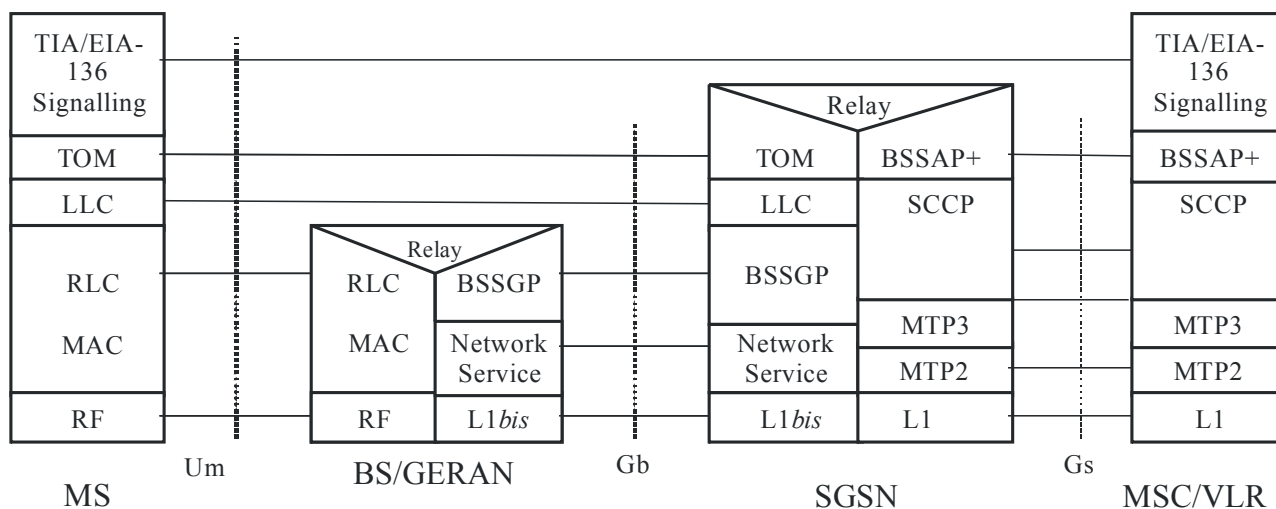
Network elements and associated reference points



Note 1 – For simplicity, not all network elements of this system are shown.

FIGURE 62

Signalling plane between a mobile station and the Gateway MSC/VLR



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5.4.1.7 Summary of major technical parameters

Table 6 lists the major technical parameters of this radio interface.

TABLE 6

Parameter	“Value”	Reference to § 5.4.2
Multiple Access Technique	TDMA	5.4.2.5.4 5.4.2.5.12 5.4.2.5.17 5.4.2.3.12 5.4.2.3.3 5.4.2.3.6
Carrier Spacing: 136+ Bearer EDGE Bearer 136HS Indoor Bearer	30 kHz 200 kHz 1.6 MHz	5.4.2.3.2
Carrier Symbol Rate: 136+ Bearer EDGE Bearer 136HS Indoor Bearer	24.3 ksymbols/s 270.833 ksymbols/s, 325 ksymbols/s 2.6 Msymbols/s	5.4.2.5.4 5.4.2.3.6 5.4.2.5.12 5.4.2.3.14 5.4.2.5.17
Data Modulation: 136+ Bearer EDGE Bearer 136HS Indoor Bearer	$\pi/4$ DQPSK, 8-PSK GMSK, 8-PSK, QPSK, 16-QAM, 32-QAM Binary Offset QAM, Quaternary Offset QAM	5.4.2.5.4 5.4.2.3.6 5.4.2.5.12 5.4.2.3.14 5.4.2.5.17

TABLE 6 (end)

Parameter	“Value”	Reference to § 5.4.2
Channel Coding: 136+ Bearer EDGE Bearer 136HS Indoor Bearer	Punctured Convolutional codes Punctured Convolutional codes, turbo codes Incremental Redundancy Punctured Convolutional codes, Type II Hybrid ARQ	5.4.2.5.5 5.4.2.3.6 5.4.2.5.1 5.4.2.5.2 5.4.2.5.12 5.4.2.3.13 5.4.2.5.17
Frame Structure: Frame Length 136+ Bearer EDGE Bearer 136HS Indoor Bearer Number of Slots per Frame 136+ Bearer EDGE Bearer 136HS Indoor Bearer	40 ms 4.615 (120/26) ms 4.615 (120/26) ms 6 8 16-64	5.4.2.5.4 5.4.2.3.3 5.4.2.3.6 5.4.2.5.12 5.4.2.3.12 5.4.2.5.17 5.4.2.5.4 5.4.2.5.12 5.4.2.3.12 5.4.2.5.17
Minimum Operating Bandwidth: 136HS Outdoor Bearer 136EHS COMPACT Bearer 136EHS Classic Bearer 136HS Indoor Bearer	2 × 600 kHz 2 × 600 kHz 2 × 2.4 MHz 2 × 1.6 MHz FDD	5.4.2.10.6 5.4.2.5.19 5.4.2.5.19 5.4.2.10.6
Spectrum Efficiency 136+ Bearer (Voice) EDGE Bearer 136HS Indoor Bearer	58.8 Erl/MHz/cell (3 sectors) 0.9495 Mbit/s/MHz/cell (Ped A) 1.1760 Mbit/s/MHz/cell (Veh A50) 1.0380 Mbit/s/MHz/cell (Veh A120) 0.332 Mbit/s/MHz/cell (Indoor A)	5.4.2.10.6
Receiver Sensitivity 136+ Bearer EDGE Bearer 136HS Indoor Bearer	−103 dBm (8 km/h) @ 3% BER (DQPSK) −101 dBm (8 km/h) @ 3% BER (8-PSK) −94 dBm (Ped B) @ 10% BLER −100 dBm (Veh A120) @ 10% BLER −95 dBm (Indoor A) @ 10% BLER	5.4.2.4.6/7/8 5.4.2.4.6/7/8 5.4.2.4.9 5.4.2.4.9 5.4.2.4.9
Standby RF Output Power	−117 dBm	5.4.2.4.9
Power Control	Per Slot and Per Carrier	5.4.2.3.6 5.4.2.5.4
Variable Data Rate	Supported with Slot aggregation and Link Adaptation	5.4.2.5.4 5.4.2.5.12 5.4.2.5.19 5.4.2.5.17
Dynamic Channel Allocation	Supported to increase Capacity	5.4.2.10.6
Duplexing Scheme	FDD	5.4.2.3.2
Frequency Stability	Base Station: 0.05 ppm Mobile Station: 0.1 ppm	5.4.2.4.9

5.4.2 Detailed specification of the radio interface

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at <http://ties.itu.int/u/itu-r/ede/rsg5/IMT-2000/GCS/GCSrev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their Web site.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

5.4.2.1 TIA/EIA-136/UWC-136

5.4.2.1.1 136-000

List of parts

This part outlines the intended scope of the TIA/EIA-136 standard and details the list of parts comprising the current revision. The parts are organized into subgroups denoted by "nXX". For example, group TIA/EIA-136-4XX contains parts 410, 420, 430 and 440.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-000	G	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2 Identities, Code Assignments, and UIM Information

5.4.2.2.1 136-005

Introduction, identification and semi-permanent memory

This part contains explanations of terms along with identity definition and selection as used in all of the parts.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-005	C	Published ANS	14/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.2 136-010

Optional mobile station facilities

This part outlines optional mobile station facilities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-010	C	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.3 136-020

SOC, BSMC, and other code assignments

This part provides a list of the system operator codes (SOC), base station manufacturer codes (BSMC), carrier specific higher layer protocol identifiers, and broadcast air-interface transport service category assignments.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-020	E	Published ANS	20/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.4 136-030**R-UIM Overview and Operations**

This part provides an overview of the operation of the Removable User Identity Module as supported in TIA/EIA-136.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 99				
TIA TIA/EIA-136-030	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5				
TIA TIA/EIA-136-030	B-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.5 136-033**R-UIM File Structure**

This part describes the file structures contained on the Removable User Identity Module.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
TIA TIA/EIA-136-033	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.6 136-034**R-UIM – ME Interface Procedures**

This part describes the interface procedures between the Removable User Identity Module and the mobile equipment.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
TIA TIA/EIA-136-034	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.7 136-036**Personalization of Mobile Equipment**

This part includes the personalization of mobile equipment.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
TIA TIA/EIA-136-036	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.8 136-037**R-UIM Application Toolkit**

This part describes an application toolkit for use with the Removable User Identity Module.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
TIA TIA/EIA-136-037	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.9 3GPP TS 01.01**GSM/EDGE Release 99 specifications**

This document lists the documents that make up the GSM/EDGE Release 99 specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.01.01V8190-2008	8.19.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.2.10 3GPP TR 21.905**Abbreviations and acronyms**

This document defines the abbreviations and acronyms used in the GSM/EDGE specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.01.04V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-290 as GSM 01.04 (ETSI TR 101 748 v8.0.0)	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.21.905V580-2005	5.8.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.21.905V6100-2006	6.10.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.21.905V740-2007	7.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.2.11 3GPP TS 22.016**International Mobile Station Equipment Identities**

This document describes the principal purpose and use of unique Equipment Identities.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.22.016V330-2003	3.3.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 016 v3.1.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.22.016V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 016 v5.0.0	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.22.016V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 016 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.22.016V710-2009	7.1.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 016 v7.1.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.12 3 GPP TS 22.022**Personalization of Mobile Equipment Stage 1**

This document provides the functionality specification for the personalization of mobile equipment.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.22.022V321-2003	3.2.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-030 as ETSI TS 122 022 v3.1.0	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.22.022V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-030 as ETSI TS 122 022 v5.0.0	B	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.22.022V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.22.022V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.2.13 3GPP TS 22.038**SIM Application Toolkit; Stage 1**

This part provides a service description for an application toolkit for use with the Subscriber Identity Module.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.22.038V340-2006	3.4.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.22.038V540-2005	5.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.22.038V650-2006	6.5.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.22.038V750-2008	7.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.2.14 3GPP TS 23.003**Numbering, addressing and identification**

This document describes the principles of numbering and addressing.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.003V3150-2007	3.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 003 v3.4.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.23.003V5110-2007	5.11.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 003 v5.10.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.23.003V6160-2009	6.16.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 003 v6.14.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.23.003V790-2009	7.9.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 003 v7.9.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.15 3GPP TS 23.038**Alphabets and language-specific information**

This document describes alphabets and language-specific information used.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.038V330-2000	3.3.0	Approved	01/01/2000	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-030 as ETSI TS 123 038 v3.3.0	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.23.038V510-2005	5.1.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-030 as ETSI TS 123 038 v5.1.0	B-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.23.038V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.23.038V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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5.4.2.2.16 3GPP TS 41.101**Technical Specifications and Technical Reports for a GERAN-based 3GPP system**

This document lists the documents that make up the GSM/EDGE Release 5, Release 6 and Release 7 specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.41.101V5130-2008	5.13.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.41.101V6110-2009	6.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.41.101V730-2009	7.3.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.2.17 3GPP TS 02.17**Subscriber Identity Modules, Functional characteristics**

This document defines the functional characteristics for the SIM used in the GSM/EDGE specifications. Standalone SIM functionality is not specified beyond Release 4. For the latest available information see § 5.4.2.13.39.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.02.17V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

5.4.2.2.18 3GPP TS 31.111**(U)SIM Application Toolkit**

This part describes an application toolkit for use with the Subscriber Identity Module.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.11.14V8180-2007	8.18.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-030 as GSM 11.14 (ETSI TS 101 267 v8.8.0)	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

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Release 5

ATIS	ATIS.3GPP.31.111V5110-2007	5.11.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-030 as ETSI TS 131 111 v5.8.0	B-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.31.111V6120-2009	6.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.31.111V7110-2009	7.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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5.4.2.2.19 3GPP TS 11.11

Specification of SIM – ME Interface

This document describes the interface between the mobile equipment and the subscriber identity module. Standalone SIM functionality is not specified beyond Release 4. For the latest available information see § 5.4.2.13.41.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.11.11V8140-2006	8.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 11.11 (ETSI TS 100 977 v8.3.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.2.20 3GPP TS 31.133

IP Multimedia Services Identity Module (ISIM) Application Programming Interface (API); ISIM API for JavaCard™

This document defines the ISIM Application Programming Interface extending the “UICC API for Java Card™”. This API allows development of an application running together with an ISIM application.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.31.133V722-2009	7.2.2	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.2.21 3GPP TR 31.918

Generic Authentication Architecture (GAA); Early implementation of Hypertext Transfer Protocol over Transport Layer Security (HTTPS) connection between a UICC and a Network Application Function (NAF)

This document gives guidance on how to perform an early implementation of HTTPS connections between a UICC-based application and a Network Application Function in the Generic Authentication Architecture (GAA).

5.4.2.2.22 3GPP TR 31.920**SIM card based Generic Bootstrapping Architecture (GBA); Early implementation feature**

This document describes the early implementation of the Generic Bootstrapping Architecture using a SIM based GSM authentication.

5.4.2.3 Channels**5.4.2.3.1 136-100****Introduction to channels**

This part provides the protocol reference model, the logical channel definitions, and the Layer 3 message mapping through Layer 2 to the physical layer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-100	B	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.2 136-110**RF channel assignments**

This part provides RF channel assignments for MS and BS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-110	B-1(E)	Approved	09/04/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.3 136-121**Digital control channel layer 1**

This part describes the digital control channel (DCCH) Layer 1 including the frame structures and channel/subchannel descriptions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-121	A	Published ANS	29/11/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.4 136-122**Digital control channel layer 2**

This part provides the digital control channel (DCCH) Layer 2 service access points, protocols, and ARQ procedures, as well as requirements on the monitoring of radio link quality.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-122	B	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.5 136-123**Digital control channel layer 3**

This part provides the digital control channel (DCCH) Layer 3 description, including the mobile station state diagram, detailed procedures (e.g. intelligent roaming), the Layer 3 message set, information element descriptions, and timer descriptions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-123	G	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.6 136-131**Digital traffic channel layer 1**

This part describes the digital traffic channel (DTC) Layer 1 including the channel structure, digital voice and data slot formats, modulation, and channel coding for the MS and BS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-131	C	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.7 136-132**Digital traffic channel layer 2**

This part describes Layer 2 for the digital traffic channel (DTC), which consists primarily of supervision information.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-132	0	Published ANS	03/03/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.8 136-133**Digital traffic channel layer 3**

This part describes digital traffic channel (DTC) Layer 3, including discontinuous transmission, mobile assisted handoff, charging rate and total charge indication, MS control signalling and formats, smart antenna support, and per-slot power control.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-133	E	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.9 136-140**Analogue control channel**

This part describes the identification call processing, signalling formats, MS and BS requirements for the analogue control channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-140	B	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.10 136-150**Analogue voice channel**

This part includes descriptions of the modulation characteristics, charging indication, MS control, and signalling formats for the analogue voice channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-150	B	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.11 3GPP TS 45.001**Physical layer on the radio path**

This document provides a general description of the organization of the physical layer for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.05.01V890-2005	8.9.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.01 (ETSI TS 100 573 v8.4.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.45.001V590-2006	5.9.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 001 v5.8.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.45.001V680-2007	6.8.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 001 v6.8.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.45.001V780-2008	7.8.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 001 v7.8.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.12 3GPP TS 45.002

Multiplexing and multiple access on the radio path

This document provides a description of multiplexing and multiple access techniques for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.05.02V8110-2005	8.11.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.02 (ETSI EN 100 908 v8.7.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.45.002V5130-2006	5.13.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 002 v5.12.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.45.002V6120-2006	6.12.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 002 v6.12.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.45.002V770-2008	7.7.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 002 v7.7.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.13 3GPP TS 45.003

Channel coding

This document provides a description of the channel coding for the physical layer for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.05.03V890-2006	8.9.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.03 (ETSI EN 300 909 v8.5.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.45.003V5140-2007	5.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 003 v5.11.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.45.003V690-2007	6.9.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 003 v6.9.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.45.003V780-2009	7.8.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 003 v7.8.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.14 3GPP TS 45.004**Modulation**

This document provides a description of the modulation techniques for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.05.04V840-2003	8.4.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.04 (ETSI EN 300 959 v8.1.2)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.45.004V511-2005	5.1.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 004 v5.1.1	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.45.004V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 004 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.45.004V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 004 v7.3.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.15 3GPP TS 45.005**Radio transmission and reception**

This document provides a general description of the radio transmission and reception for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.05.05V8200-2006	8.20.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.05 (ETSI EN 300 910 v8.5.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.45.005V5140-2006	5.14.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 005 v5.10.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

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Release 6

ATIS	T1.3GPP.45.005V6140-2007	6.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 005 v6.14.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	T1.3GPP.45.005V7170-2009	7.17.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 005 v7.17.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.16 3GPP TS 45.008

Radio Subsystem Link Control

This document provides a general description of the radio link control for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.05.08V8230-2006	8.23.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.08 (ETSI TS 100 911 v8.5.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.45.008V5230-2009	5.23.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 008 v5.18.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.45.008V6210-2009	6.21.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 008 v6.19.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.45.008V7140-2009	7.14.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 008 v7.14.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.17 3GPP TS 45.009

Link Adaptation

This document provides a general description of the link adaptation for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 05.09 (ETSI TS 101 709 v7.3.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 99

ATIS	ATIS.3GPP.05.09V860-2006	8.6.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 5

ATIS	ATIS.3GPP.45.009V560-2006	5.6.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 145 009 v5.5.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.45.009V620-2006	6.2.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 145 009 v6.2.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.45.009V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 145 009 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.18 3GPP TS 45.010**Radio Subsystem Synchronization**

This document provides a description of the synchronization of the radio link for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.05.10V8120-2005	8.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 05.10 (ETSI TS 100 912 v8.4.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.45.010V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 010 v5.3.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.45.010V670-2008	6.7.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 010 v6.6.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.45.010V760-2008	7.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 145 010 v7.6.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.19 3GPP TS 45.022**Radio Link management in hierarchical networks**

This document describes the radio link management for hierarchical networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.05.22V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.45.022V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.45.022V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.45.022V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.20 3GPP TS 44.001**Mobile Station – Base station system interface general aspects**

This document provides a general description of the mobile station – Base station system (MS-BSS) interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.01V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.44.001V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.001V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.001V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.21 3GPP TS 44.003**Mobile Station – Base station system interface channel structures and access capabilities**

This document provides a description of the channel structures and access capabilities for the mobile station – Base station system (MS-BSS) interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.03V802-2003	8.0.2	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	ATIS.3GPP.44.003V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.44.003V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.44.003V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.3.22 3GPP TS 44.004**Layer 1 General requirements**

This document provides a general description of the requirements for Layer 1 for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.04V812-2003	8.1.2	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.44.004V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.004V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.004V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.23 3GPP TS 44.005**Data Link (DL) layer general aspects**

This document provides a general description of the Data Link layer for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.05V802-2003	8.0.2	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 04.05 (ETSI EN 300 937 v8.0.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.005V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 005 v5.0.1	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.44.005V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 005 v6.1.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.44.005V720-2009	7.2.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 005 v7.2.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.24 3GPP TS 44.006**Mobile Station – Base station system interface Data link layer specification**

This document provides the specification of the data link layer for the mobile station -Base station system (MS-BSS) interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.06V840-2009	8.4.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.44.006V520-2009	5.2.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.006V680-2009	6.8.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.006V720-2009	7.2.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.3.25 3GPP TS 44.018**Mobile Radio interface Layer 3 specification, RRC protocol**

This document provides a description of the Radio Resource Control protocol of the layer 3 Mobile Radio interface for the 200 kHz

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.04.18V8270-2007	8.27.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 04.18 (ETSI TS 101 503 v8.5.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.018V5230-2009	5.23.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 018 v5.18.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.44.018V6240-2009	6.24.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 018 v6.22.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.44.018V7160-2009	7.16.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 018 v7.16.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.26 3GPP TS 44.021**Rate Adaption on the Mobile Station – Base station system (MS-BSS) interface**

This document provides the specification of rate adaption on the mobile station – Base station system (MS-BSS) interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.21V830-2003	8.3.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.44.021V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.021V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.021V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.27 3GPP TS 44.031**Location Services (LCS); Mobile station – Serving mobile location centre (SMLC) radio resource LCS protocol**

This document provides the specification of the radio resource LCS protocol for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.04.31V8180-2007	8.18.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-740 as GSM 04.31 (ETSI TS 101 527 v8.1.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.031V5140-2007	5.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.031V690-2007	6.9.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.031V7110-2009	7.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.3.28 3GPP TS 44.035**Broadcast network assistance for E-OTD and GPS positioning methods**

This document provides the specification of broadcast assistance data for location services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.35V841-2003	8.4.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-740 as GSM 04.35 (ETSI TS 101 528 v8.1.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.035V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.035V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.035V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.29 3GPP TS 44.068**Group Call control (GCC) protocol**

This document defines the protocol for the group call function.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.68V810-2003	8.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.44.068V501-2003	5.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.068V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.068V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.30 3GPP TS 44.069**Broadcast Call control (BCC) protocol**

This document defines the protocol for the Broadcast Call Control (BCC) protocol used by the Voice Broadcast Call Service (VBCS) on the radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.69V810-2003	8.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.44.069V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.44.069V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.44.069V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.3.31 3GPP TS 44.071**Location Services (LCS); Mobile radio interface Layer 3**

This document provides the location services layer 3 specification for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.71V840-2003	8.4.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.44.071V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.071V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.071V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.32 3GPP TS 43.010**GSM Public Land Mobile Network (PLMN) Connection types**

This document describes the connection types for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP. 03.10V830-2003	8.3.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP. 43.010V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP. 43.010V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP. 43.010V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.33 3GPP TS 43.013**Discontinuous Reception (DRX) in the GSM system**

This document describes the discontinuous reception function for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.03.13V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.43.013V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.43.013V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.013V700-2007	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.34 3GPP TS 43.022**Functions related to Mobile Station in idle mode and group receive mode**

This document describes the mobile station functions during idle or group receive mode for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.03.22V870-2003	8.7.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.43.022V520-2006	5.2.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.43.022V630-2006	6.3.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.022V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.35 3GPP TR 43.055**Dual Transfer Mode (DTM); Stage 2**

This document describes the dual mode operation of a mobile station in both packet and circuit mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.03.55V840-2006	8.4.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	ATIS.3GPP.43.055V550-2006	5.5.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.43.055V6150-2007	6.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.43.055V760-2008	7.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.3.36 3GPP TS 24.007**Mobile Radio interface Signalling Layer 3, General Aspects**

This document provides a description of the signalling aspects of the layer 3 Mobile Radio interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.007V3100-2005	3.10.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 007 v3.3.1	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.24.007V540-2006	5.4.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 007 v5.3.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.24.007V650-2006	6.5.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 007 v6.5.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.24.007V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 007 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.37 3GPP TS 24.008**Mobile Radio interface Layer 3, Core Network protocols – Stage 3**

This document provides a description of the Core network protocols of the layer 3 Mobile Radio interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.008V3200-2006	3.20.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 008 v3.3.1	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 5

ATIS	ATIS.3GPP.24.008V5160-2007	5.16.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 008 v5.12.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.24.008V6190-2008	6.19.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 008 v6.16.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.24.008V7140-2009	7.14.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 124 008 v7.14.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.38 3GPP TS 24.010**Mobile Radio interface Layer 3, Supplementary services – General**

This document provides a general description of the supplementary services of the layer 3 Mobile Radio interface for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.010V320-2002	3.2.0	Approved	03/05/2002	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.24.010V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.24.010V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.24.010V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.3.39 3GPP TS 24.022**Radio Link Protocol (RLP) for circuit switched bearer and teleservices**

This document provides a general description of the radio link protocol for the circuit switched bearer and teleservices for the 200 kHz

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.24.022V350-2005	3.5.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.24.022V550-2005	5.5.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.24.022V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.24.022V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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5.4.2.3.40 3GPP TR 45.902**Flexible Layer One (FLO)**

This document contains an overview of Flexible Layer One (FLO), its architecture and its impact on the GERAN radio protocol stacks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.45.902V680-2006	6.8.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TR 145 902 v6.8.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.45.902V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TR 145 902 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.3.41 3GPP TS 43.026**Multiband operation of GSM/DCS 1800 by a single operator**

This document contains an overview of operation of GERAN at 900 MHz and 1800 MHz by a single operator.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.43.026V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.026V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.3.42 3GPP TS 43.059**Functional stage 2 description of Location Services (LCS) in GERAN**

This document contains a stage 2 description of the location services provided in GERAN networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.43.059V660-2008	6.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.059V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4 Minimum performance**5.4.2.4.1 136-210****ACELP minimum performance**

This part details the BS minimum performance requirements for the ACELP vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-210	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.2 136-220**VSELP minimum performance**

This part details the minimum performance requirements for the VSELP vocoder. This standard includes a software distribution.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-220	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.3 136-230**US1 minimum performance**

This part details the BS minimum performance requirements for the US1 vocoder. This standard includes a software distribution.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-230	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.4 136-240**Minimum Performance for Adaptive Multi-rate Codec**

This part details the minimum performance requirements for the Adaptive Multi-Rate voice coder. This standard includes a software distribution.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-240	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.5 136-250**VAD Minimum Performance**

This part details the minimum performance requirements for the Voice Activity Detection feature. This standard includes a software distribution.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-250	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.6 136-270**Mobile stations minimum performance**

This part details definitions, methods of measurement, and MS minimum performance requirements operating 136+ bearers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-270	C	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.7 136-271**Mobile stations minimum performance for Global Circulation**

This part details definitions, methods of measurement, and minimum performance requirements for 2 GHz Wireless1 mobile stations. Unless otherwise stated, these requirements apply only to digital operation, within the regulatory mandates of the European Union "Electromagnetic compatibility and Radio spectrum Matters (ERM); Base stations (BS) and user equipment (UE) for IMT-2000 Third Generation cellular networks; Part 8: Harmonized EN for IMT-2000 TDMA Single Carrier (UWC 136) (UE)" covering essential requirements of article 3.2 of the RandTTE Directive.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-271	0	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.8 136-280**Base stations minimum performance**

This part details definitions, methods of measurement, and BS minimum performance requirements operating 136+ bearers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-280	D	Published ANS	29/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.9 136-290**RF Minimum performance requirements for 136HS Outdoor and 136HS Indoor bearers**

This part details the RF minimum performance requirements for BS and MS operating 136HS/136EHS Outdoor and 136HS Indoor bearers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-290	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.10 3GPP TS 23.110**UMTS Access Stratum Services and Functions**

This document specifies the services provided by the Access Stratum to the rest of the GERAN/UMTS systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.23.110V500-2005	5.0.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.110V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.110V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.4.11 3GPP TS 23.122**NAS Functions related to Mobile Station in idle mode**

This part details the Non-Access Stratum functional requirements of the Mobile station in idle mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.122V3100-2005	3.10.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.23.122V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 122 v5.3.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.23.122V650-2006	6.5.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 122 v6.5.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.23.122V7121-2008	7.12.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 122 v7.12.1	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.12 3GPP TS 27.060**Packet Domain; MS supporting packet switched services**

This part details the packet domain functional requirements of the Mobile station.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.27.060V380-2005	3.8.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 127 060 v3.4.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.27.060V560-2005	5.6.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 127 060 v5.6.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.27.060V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 127 060 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.27.060V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 127 060 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.4.13 3GPP TS 11.17**SIM conformance test specification**

This part details the conformance test requirements of the Subscriber Identity Module. Standalone SIM functionality is not specified beyond Release 4. For the latest available information see § 5.4.2.13.42.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-030 as GSM 11.17 (ETSI TS 301 086 v7.0.2)	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	ATIS.3GPP.11.17V820-2006	8.2.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

5.4.2.4.14 3GPP TR 34.902**Derivation of test tolerances for multi-cell Radio Resource Management (RRM) conformance**

This document specifies a method used to derive the test tolerances and relating them to the measurement uncertainties of the test.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.34.902V530-2008	5.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.34.902V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.15 3GPP TS 43.058**Characterization, test methods, and quality assessment for handsfree Mobile Stations**

This document describes the testing and characterization of handsfree devices for MSs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.03.58V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.43.058V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.43.058V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.058V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.16 3GPP TS 44.013**Performance requirements on mobile radio interface**

This part details the performance requirements of the Mobile station radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.13V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.44.013V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.013V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.44.013V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.4.17 3GPP TS 44.014**Individual equipment type requirements and interworking; Special conformance testing**

This part details the packet domain functional requirements of the Mobile station.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.04.14V860-2005	8.6.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-290 as GSM 04.14 (ETSI TS 101 293 v8.1.0)	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.014V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.014V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.014V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.18 3GPP TS 45.015**Release independent Downlink Advanced Receiver Performance (DARP); Implementation guidelines**

This document specifies requirements on MSs supporting Downlink Advanced Receiver Performance (DARP) that are independent of release. However, in order to implement an MS that conforms to a particular release but supports DARP, which is specified in a later release, it is necessary to specify some extra requirements.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.45.015V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.45.015V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.19 3GPP TR 45.050**Background for Radio Frequency requirements**

This part gives the background information for the specification of the radio frequency requirements in 45.005.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.05.50V820-2003	8.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-290 as GSM 05.50 (ETSI TR 101 115 v8.1.0)	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.45.050V501-2003	5.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.45.050V621-2006	6.2.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.45.050V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.20 3GPP TR 45.903**Feasibility study on Single Antenna Interference Cancellation (SAIC) for GSM networks**

This document contains the results of a feasibility study analyzing single antenna interference cancellation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.45.903V601-2008	6.0.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.45.903V701-2008	7.0.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.21 3GPP TS 51.010-1**Mobile Station conformance specification; Part 1**

This document provides a general description of the radio transmission and reception for the 200 kHz channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.11.10-1V830-2003	8.3.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-290 as GSM 11.10-1 (ETSI EN 300 607-1 v8.1.1)	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.51.010-1V5110-2005	5.11.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx

Release 6

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.51.010-1V670-2007	6.7.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.51.010-1V7120-2009	7.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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5.4.2.4.22 3GPP TS 51.010-2**Mobile Station conformance specification; Part 2 Protocol Implementation Conformance Statement (PICS) proforma specification**

This document provides mobile station protocol implementation conformance statement (PICS) proforma.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.51.010-2V5110-2005	5.11.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.51.010-2V660-2007	6.6.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.51.010-2V7120-2009	7.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.4.23 3GPP TS 51.010-3**Mobile Station conformance specification; Part 3: Layer 3 (L3) Abstract Test Suite (ATS)**

This part details the Layer 3 conformance test abstract test suite.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.51.010-3V540-2005	5.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.51.010-3V630-2006	6.3.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

5.4.2.4.24 3GPP TS 11.10-4**Mobile Station conformance specification; Part 4 SIM Application Toolkit conformance specification**

This document provides a conformance specification for the SIM Application toolkit. Standalone SIM functionality is not specified beyond Release 4. For the latest available information see § 5.4.2.13.40.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.11.10-4V8150-2007	8.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.4.25 3GPP TS 51.010-5**Mobile Station conformance specification; Part 5: GERAN/UTRAN interaction Abstract Test Suite (ATS)**

This document details the conformance test abstract test suite for GERAN/UTRAN systems interaction.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.51.010-5V660-2007	6.6.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.51.010-5V7121-2009	7.12.1	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.4.26 3GPP TS 51.021**Base Station System equipment specification; radio aspects**

This document details the radio aspects of the BSS equipment specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.11.21V8110-2009	8.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-290 as	A	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.51.021V550-2009	5.5.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.51.021V640-2009	6.4.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.51.021V760-2009	7.6.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.4.27 3GPP TS 26.077**Minimum performance requirements for noise suppresser application to the Adaptive Multi-Rate (AMR) speech encoder**

This document details the minimum performance requirements for the noise suppression function of the AMR speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.077V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.077V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.4.28 3GPP TS 34.114**User Equipment (UE)/Mobile Station (MS) Over the Air (OTA) antenna performance; Conformance testing**

This document describes the methods to be used in order to assess the radiated performances of the user equipment/mobile stations (UE/MS) in active mode in both the up- and the downlink.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.34.114V700-2009	7.0.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.4.29 3GPP TS 51.026**Base Station System equipment specification; Part 4: Repeaters**

This document details the BSS equipment specification for repeaters.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.51.026V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.51.026V710-2009	7.1.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.5 Data services**5.4.2.5.1 136-310****Radio link Protocol 1**

This part specifies a radio link protocol (RLP1) that provides error recovery functions allowing Layer 3 functions to asynchronously transport data octets across a TDMA radio interface utilizing an underlying half-rate, full-rate, double-rate, or triple-rate digital traffic channel as specified in TIA-136-131, 132, and 133.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-310	A	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.2 136-320**Radio link Protocol 2**

This part specifies a radio link protocol (RLP2) that allows Layer 3 functions to isochronously transport data octets across a TDMA radio interface utilizing an underlying half-rate, full-rate, double-rate, or triple-rate digital traffic channel as specified in TIA-136-131, 132, and 133.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-320	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.3 136-330**Packet-data service – Overview**

This part provides an overview of the GPRS-136 packet data service. An overview of the network reference model, BS and MS protocols, channel types, and options are provided. In addition, an overview of the 30 kHz 136+ bearer is provided.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-330	0-1(E)	Approved	09/04/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.4 136-331**Packet-data service – 136+ physical layer**

This part provides the 30 kHz 136+ physical layer specification including slot formats, frame structure, modulation, and channel coding.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-331	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.5 136-332**Packet-data service – 136+ medium access control**

This part provides the 30 kHz 136+ packet data MAC layer specification including MAC PDUs, transaction management, error recovery, and random access control.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-332	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.6 136-333**Packet-data service – Logical-link control**

This part defines the logical link control (LLC) layer protocol to be used for packet data transfer between the MS and serving GPRS support node (SGSN).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-333	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.7 136-334**Packet-data service – Subnetwork dependent convergence protocol**

This part provides the description of the subnetwork dependent convergence protocol (SNDCP). The user of the services provided by SNDCP is a packet data protocol (PDP) at the MS or the relay at the serving GPRS support node (SGSN).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-334	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.8 136-335**Packet-data service – Radio resource management**

This part specifies the radio resource management in a GPRS-136 packet data system. The entities in a GPRS-136 MS and BS that are used to achieve the goals of radio resource management are the radio resource management entity (RRME) and the broadcast management entity (BME) and are both described in this part.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-335	0-1(E)	Approved	09/04/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.9 136-336**Packet-data service – Mobility management**

This part describes GPRS-136 mobility management and functions such as location tracking and user-identity confidentiality. The GPRS-136 packet data network combines TIA/EIA-41 circuit switched network elements with GPRS network elements.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-336	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.10 1 36-337**Packet-data service – Tunnelling of signalling messages**

This part specifies procedures to provide coordination between the TIA/EIA-136 circuit switched services controlled at the mobile switching centre (MSC)/visitors location register (VLR) and the GPRS-136 packet switched services controlled at the serving GPRS support node (SGSN).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-337	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.11 136-340**Packet-data service – 136HS Outdoor overview**

This part provides an overview of the 200 kHz 136HS outdoor bearer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-340	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.12 136-341**Packet-data service – 136HS Outdoor physical layer**

This part provides the 200 kHz 136HS Outdoor bearer physical layer specification including slot formats, frame structure, modulation, and channel coding.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-341	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.13 136-342**Packet-data service – 136HS Outdoor RLC/MAC**

This part provides the 200 kHz 136HS Outdoor bearer RLC/MAC layer specification including RLC blocks, MAC protocol data units (PDUs), transaction management, error recovery, and random access control.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-342	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.14 136-350**Data-service control**

This part provides a description of the user-network commands and responses used to access async data service, fax data service, and other services running over radio link protocol 1.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-350	C	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.15 136-351**EGPRS-136 AT Command Set**

This part describes of the user-network commands and responses used to access the EGPRS-136 packet data service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-351	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.16 136-360**Packet-data service – 136HS Indoor overview**

This part provides an overview of the 1.6 MHz 136HS indoor bearer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-360	0-1(E)	Approved	09/04/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.17 136-361**Packet-data service – 136HS Indoor physical layer**

This part provides the 1.6 MHz 136HS Indoor bearer physical layer specification including slot formats, frame structure, modulation, and channel coding.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-361	0-1(E)	Approved	09/04/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.18 136-362**Packet-data service – 136HS Indoor RLC/MAC**

This part provides the 1.6 MHz 136HS indoor bearer RLC/MAC layer specification including RLC blocks, MAC PDUs, transaction management, error recovery, and random access control.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-362	0-1(E)	Approved	09/04/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.19 136-370**Enhanced General Packet Data Service (EGPRS-136) Overview**

This part provides an overview of the Enhanced General Packet Data Service (EGPRS-136).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
TIA	TIA/EIA-136-370	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
TIA	TIA/EIA-136-370	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
TIA	TIA/EIA-136-370	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
TIA	TIA/EIA-136-370	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.20 136-376**Enhanced General Packet Data Service (EGPRS-136) Mobility Management (MM)**

This part describes the mobility management aspects of Enhanced General Packet Data Service (EGPRS-136).

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 99				
TIA TIA/EIA-136-376	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5				
TIA TIA/EIA-136-376	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6				
TIA TIA/EIA-136-376	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7				
TIA TIA/EIA-136-376	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.21 136-377**EGPRS-136 Gs interface Specification**

This part describes operation of the interface between the MSC in the ANSI-41 network, and the SGSN in the EGPRS-136 network, in support of packet data operation.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 99				
TIA TIA/EIA-136-377	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5				
TIA TIA/EIA-136-377	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6				
TIA TIA/EIA-136-377	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7				
TIA TIA/EIA-136-377	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.22 3GPP TS 03.46**Technical realization of Facsimile Group 3 Service-non. This document specifies the Group 3 Facsimile function for non transparent operation.**

This document specifies the Group 3 Facsimile function for non transparent operation.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 99				
ATIS T1.3GPP.03.46V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

5.4.2.5.23 3GPP TS 22.034**High Speed circuit switched data (HSCSD); Stage 1**

This document provides the stage 1 service description for High speed circuit switched data.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.22.034V321-2000	3.2.1	Approved	01/04/2000	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP. 22.034V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP. 22.034V610-2007	6.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP. 22.034V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.24 3GPP TS 22.060**GPRS Service Description; Stage 1**

This document provides an overall service description for the General Packet Radio Service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.22.060V350-2000	3.5.0	Approved	01/10/2000	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 060 v3.3.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.22.060V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 060 v5.3.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.22.060V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 060 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.22.060V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 060 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.25 3GPP TS 23.034**High Speed circuit switched data (HSCSD); Stage 2**

This document provides the stage 2 description for High speed circuit switched data.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.034V330-2000	3.3.0	Approved	01/12/2000	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.23.034V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.034V600-2005	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.034V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.26 3GPP TS 23.060**GPRS Service Description; Stage 2**

This document provides an overall stage 2 service description for the General Packet Radio Service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.060V3170-2007	3.17.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 060 v3.3.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.23.060V5130-2007	5.13.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 060 v5.9.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.23.060V6150-2007	6.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 060 v6.15.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.23.060V780-2009	7.8.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-376 as ETSI TS 123 060 v7.8.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.27 3GPP TS 23.202**Circuit switched data data bearer services**

This document provides an overview of the architecture and issues related to the provision of Circuit Switched Bearer Services in a3G mobile network (UMTS) operating in UTRAN or GERAN Iu mode. Handover to GERAN A/Gb mode is also considered.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.23.202V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.202V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.28 3GPP TS 29.002**Mobile Application Part (MAP) specification**

This document provides the specification for the GSM/EDGE/UMTS MAP.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.29.002V3200-2005	3.20.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 002 v3.4.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.29.002V5130-2007	5.13.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 002 v5.10.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.29.002V6160-2007	6.16.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 002 v6.16.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.29.002V7120-2008	7.12.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 002 v7.12.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.29 3GPP TS 29.016**GPRS SGSN – VLR; Gs interface Network Service specification**

This document provides the specification for the General Packet Radio Service Serving GPRS Support Node (SGSN) – Visitors Location Register (VLR) Gs Interface network service specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.29.016V310-2000	3.1.0	Approved	01/09/2000	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 016 v3.0.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.29.016V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 016 v5.0.0	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.29.016V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 016 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.29.016V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 016 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.30 3GPP TS 29.018**GPRS SGSN – VLR; Gs interface Layer 3 specification**

This document provides the specification for the General Packet Radio Service Serving GPRS Support Node (SGSN) – Visitors Location Register (VLR) Gs Interface layer 3 specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.29.018V3110-2005	3.11.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 018 v3.3.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.29.018V550-2005	5.5.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 018 v5.5.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.29.018V650-2007	6.5.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 018 v6.5.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.29.018V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 018 v7.3.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.31 3GPP TS 29.060**GPRS Tunnelling Protocol (GTP) across Gn and Gp Interface**

This document provides the specification for the General Packet Radio Service Tunnelling Protocol (GTP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.29.060V3190-2005	3.19.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 060 v3.4.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.29.060V5140-2006	5.14.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 060 v5.12.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.29.060V6200-2009	6.20.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 060 v6.18.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.29.060V7120-2009	7.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 129 060 v7.12.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.32 3GPP TS 01.61**GPRS ciphering algorithm requirements**

This document provides the requirements for the General Packet Radio ciphering algorithms. Standalone ciphering aspects for GSM GPRS are not specified beyond Release 4. For the latest available information see § 5.4.2.13.37.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.01.61V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

5.4.2.5.33 3GPP TS 43.045**Technical realization of Facsimile Group 3 Service-transparent**

This document specifies the Group 3 Facsimile function for transparent operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.03.45V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.43.045V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.43.045V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.045V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.34 3GPP TS 43.064**Overall description of the GPRS radio interface; Stage 2**

This document provides an overall stage 2 description of the General Packet Radio Service radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.03.64V8120-2005	8.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 03.64 (ETSI TS 101 350 v8.5.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.43.064V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 064 v5.3.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.43.064V6110-2007	6.11.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 064 v6.11.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.43.064V7120-2009	7.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 064 v7.12.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.35 3GPP TS 44.060**GPRS MS-BSS interface; RLC/MAC**

This document provides the detailed specification for the General Packet Radio Service Mobile Station – Base Station System interface Radio Link Control and Medium Access Control.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.04.60V8270-2006	8.27.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 04.60 (ETSI TS 101 349 v8.5.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.060V5210-2008	5.21.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 060 v5.14.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.44.060V6260-2009	6.26.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 060 v6.22.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.44.060V7160-2009	7.16.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 060 v7.16.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.36 3GPP TS 44.064**GPRS MS-SGSN; Logical Link Control layer**

This document provides the detailed specification for the General Packet Radio Service Mobile Station – Serving GPRS Support Node interface Logical Link Control layer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.64V870-2003	8.7.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 04.64 (ETSI TS 101 351v8.4.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.44.064V510-2003	5.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 064 v5.1.0	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.44.064V620-2007	6.2.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 064 v6.2.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.44.064V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 064 v7.3.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.37 3GPP TS 44.065**GPRS MS-SGSN; Subnetwork Dependent Convergence Protocol**

This document provides the detailed specification for the General Packet Radio Service Mobile Station – Serving GPRS Support Node interface Subnetwork Dependent Convergence Protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.65V820-2003	8.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 124 065 v3.1.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.44.065V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 065 v5.2.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.44.065V660-2007	6.6.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 065 v6.6.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.44.065V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 144 065 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.38 3GPP TS 48.014**GPRS BSS-SGSN interface; Gb interface Layer 1**

This document provides the detailed specification for the General Packet Radio Service Base Station System – Serving GPRS Support Node Gb Interface Layer 1.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.14V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 08.14 (ETSI TS 101 298 v8.0.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.48.014V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 014 v5.0.1	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.48.014V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 014 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.48.014V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 014 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.39 3GPP TS 48.016**GPRS BSS-SGSN interface; Network Service**

This document provides the detailed specification for the General Packet Radio Service Base Station System – Serving GPRS Support Node Network service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.16V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 08.16 (ETSI TS 101 299 v8.0.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.48.016V540-2005	5.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 016 v5.4.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.48.016V650-2006	6.5.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 016 v6.5.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.48.016V740-2008	7.4.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 016 v7.4.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.40 3GPP TS 48.018**GPRS BSS-SGSN; BSSGP Protocol**

This document provides the detailed specification for the General Packet Radio Service Base Station System – Serving GPRS Support Node BSS GPRS protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.08.18V8120-2005	8.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as GSM 08.18 (ETSI TS 101 343 v8.3.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.48.018V5140-2007	5.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 018 v5.11.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.48.018V6190-2007	6.19.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 018 v6.19.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.48.018V7120-2008	7.12.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 148 018 v7.12.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.41 3GPP TS 23.221**GERAN/UMTS Architectural Requirements**

This document provides the specification for the architectural requirements for UMTS and GERAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.23.221V5110-2005	5.11.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 221 v5.11.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.23.221V630-2006	6.3.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 221 v6.3.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.23.221V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 221 v7.2.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.42 3GPP TS 23.228**IP Multimedia Subsystem (IMS); Stage 2**

This document provides the Stage 2 description for the IP Multimedia Subsystem (IMS).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.23.228V5150-2007	5.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 228 v5.12.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.23.228V6160-2007	6.16.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 228 v6.16.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.23.228V7140-2009	7.14.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 228 v7.14.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.43 3GPP TS 43.051**GSM/EDGE Radio Access Network (GERAN) overall description**

This document provides the overall description specification for the GSM/EDGE Radio Access Network (GERAN).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.43.051V5100-2005	5.10.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 051 v5.10.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.43.051V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 051 v6.0.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.43.051V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 051 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.5.44 3GPPTS 44.118**Mobile radio interface layer 3 specification; Radio Resource Control (RRC) protocol for Iu mode**

This document provides the layer 3 specification for the Radio Resource Control protocol for Iu mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.44.118V5110-2006	5.11.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.118V641-2006	6.4.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.118V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.45 3GPP TS 44.160**GPRS Mobile station – Base station system (BSS) interface; Radio LinkControl/Medium Access Control (RLC/MAC) protocol for Iu mode**

This document provides the specification for the General Packet Data Service Radio Link Control/Medium Access Control (RLC/MAC) protocol for Iu mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.44.160V580-2005	5.8.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.160V650-2006	6.5.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.160V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.46 3GPP TR 45.912**Feasibility study for evolved GSM/EDGE Radio Access Network (GERAN)**

This Report describes a feasibility study for the evolved GERAN, the objectives of which are to: increase capacity, coverage and data rates; reduce latency; and enhance service continuity with other RATs; while minimising impacts to infrastructure.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.45.912V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.5.47 3GPP TR 49.995**General Packet Radio Service (GPRS); Interworking between modified Public Land Mobile Network (PLMN) supporting GPRS and legacy GPRS mobiles**

This Report describes issues relating to the GPRS specifications, which lead to the specifications being modified after the placement of GPRS compliant mobiles into the market place. Where possible the report clarifies any recommended measures which may be adopted by the GPRS infrastructure to enable interworking to be obtained between the GPRS infrastructure and legacy Mobile Station (MS) implementations of the GPRS specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.49.995V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.49.995V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6 Voice coders**5.4.2.6.1 136-410****ACELP**

This part gives a bit exact description of the ACELP speech and channel codec for a TIA enhanced full rate codec. The codec consists of a 7.4 kbit/s ACELP speech codec and two channel codecs (forward error correction): channel coding 1 (CC1) a 5.6 kbit/s channel codec and channel coding 2 (CC2), a 6.5 kbit/s channel codec. This standard includes a software distribution.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-410	0	Published ANS	29/11/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.2 136-420**VSELP**

The speech coding algorithm described in this part is a member of a class of speech codecs known as code excited linear predictive coding (CELP), stochastic coding or vector excited speech coding. These techniques use codebooks to vector quantize the excitation (residual) signal. The speech coding algorithm is a variation on CELP called vector-sum excited linear predictive coding (VSELP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-420	0	Published ANS	03/03/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

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5.4.2.6.3 136-430

US1

This part gives a bit exact description of an enhanced ACELP voice coder which runs over a 136+ 8-PSK DTC. The codec consists of a 12.2 kbit/s ACELP speech codec and a 7.75 kbit/s channel codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-430	0	Published ANS	29/11/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.4 136-440

Adaptive Multi-Rate Codec

This part gives a bit exact description of the Adaptive Multi-rate speech and channel codec that may be operated on a 30 kHz Digital Traffic Channel.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	TIA/EIA-136-440	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
TIA	TIA/EIA-136-440	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
TIA	TIA/EIA-136-440	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
TIA	TIA/EIA-136-440	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.5 3GPP TS 26.071

AMR Speech Codec; General Description

This document provides an introduction to the set of AMR specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.71 (ETSI EN 301 703 v7.0.2)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	T1.3GPP.26.071V301-2003	3.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.071V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 071 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.26.071V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 071 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.071V701-2008	7.0.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 071 v7.0.1)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.6 3GPP TS 26.073**ANSI-C code for AMR Speech Codec**

This document provides the ANSI-C code for the AMR specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.73 (ETSI EN 301 712 v7.4.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	T1.3GPP.26.073V330-2003	3.3.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.26.073V530-2005	5.3.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 073 v5.3.0)	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.073V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 073 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.26.073V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 073 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.7 3GPP TS 26.074**Test sequences for AMR Speech Codec**

This document provides the test sequences for the AMR specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.74 (ETSI EN 301 713 v7.0.3)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 99

ATIS	T1.3GPP.26.074V311-2003	3.1.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 5

ATIS	T1.3GPP.26.074V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 074 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.26.074V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 074 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.074V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 074 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.8 3GPP TS 26.090**AMR Speech Transcoding**

This document provides the speech coding definition for the AMR specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.90 (ETSI EN 301 704 v7.2.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	T1.3GPP.26.090V310-1999	3.1.0	Approved	01/12/1999	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.090V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 090 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.090V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 090 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.26.090V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 090 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.9 3GPP TS 26.091**Error Concealment of lost frames for AMR speech codec**

This document provides the bad frame masking definition for the AMR speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.91 (ETSI EN 301 705 v7.1.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	T1.3GPP.26.091V310-1999	3.1.0	Approved	01/12/1999	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.091V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 091 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.091V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 091 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.26.091V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 091 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.10 3GPP TS 26.092**Comfort noise for AMR speech traffic channels**

This document provides the comfort noise definition for the AMR speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.92 (ETSI EN 301 706 v7.1.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	T1.3GPP.26.092V301-1999	3.0.1	Approved	01/08/1999	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.092V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 092 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.26.092V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 092 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.092V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 092 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.11 3GPP TS 26.093**Source rate controlled operation for AMR speech codec**

This document provides the DTX definition for the AMR speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.93 (ETSI EN 301 707 v7.3.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 99					
ATIS	T1.3GPP.26.093V330-2000	3.3.0	Approved	01/12/2000	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.093V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 093 v5.2.0)	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.093V610-2007	6.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 093 v6.1.0)	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.26.093V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 093 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.12 3GPP TS 26.094**Voice Activity Detector for AMR speech codec**

This document provides the VAD definition for the AMR speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 98					
TIA	Included in TIA/EIA-136-440 as GSM 06.94 (ETSI EN 301 708 v7.1.1)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 99

ATIS	T1.3GPP.26.094V300-1999	3.0.0	Approved	01/10/1999	https://www.atis.org/docstore/default.aspx
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Release 5

ATIS	T1.3GPP.26.094V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 094 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.26.094V610-2007	6.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 094 v6.1.0)	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.094V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 094 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.13 3GPP TS 26.101**Mandatory speech codec speech processing functions; AMR speech codec frame structure**

This document describes a generic frame format for the Adaptive Multi-Rate (AMR) speech codec and the Enhanced Full Rate (GSM-EFR) speech codec. This format is used as a common reference point when interfacing speech frames between different elements of the 3G system and between different systems. Appropriate mappings to and from this generic frame format is used within and between each system element.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.101V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.101V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.14 3GPP TS 26.102**AMR speech codec; Interface to Iu and Uu**

This document provides the interface definition for the AMR speech codec to Iu and Uu interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.26.102V340-2005	3.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.26.102V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 102 v5.2.0)	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

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ATIS	ATIS.3GPP.26.102V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 102 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.102V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 102 v7.1.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.15 3GPP TS 26.103

Speech codec list for GSM and UMTS

This document provides the list of speech codecs for GSM and UMTS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.26.103V320-2003	3.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.26.103V560-2005	5.6.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.103V620-2007	6.2.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.103V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.16 3GPP TS 26.104

ANSI-C code for floating point AMR speech codec

This document provides the ANSI-C code definition for the floating point AMR speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.26.104V350-2005	3.5.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.26.104V540-2005	5.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 104 v5.4.0)	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.104V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 104 v6.1.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.104V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 104 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.17 3GPP TS 26.110**Codec for circuit switched multimedia telephony service; General description**

This document provides the general description for the codec used for multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.26.110V310-2001	3.1.0	Approved	01/03/2001	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.110V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 110 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.110V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 110 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.26.110V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 110 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.18 3GPP TS 26.111**Codec for circuit switched multimedia telephony service; Modifications to H.324**

This document provides the description for the modifications to H.324 for multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.26.111V340-2000	3.4.0	Approved	01/12/2000	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.26.111V510-2005	5.1.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 111 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.111V620-2008	6.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 111 v6.1.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.111V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TS 126 111 v7.1.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.19 3 GPP TS 26.226**Cellular text telephone modem transmitter; General description**

This document specifies the Cellular Text Telephone Modem (CTM) which allows reliable transmission of a text telephone conversation alternating with a speech conversation through the existing speech communication paths in cellular mobile phone systems. This reliability is achieved by an improved modulation technique, including error protection, interleaving and synchronization.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.226V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.226V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.20 3GPP TS 26.230**Global text telephony (GTT); Cellular text telephone modem transmitter C-code description**

This document provides the C-code description for the GTT modem transmitter.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.230V502-2005	5.0.2	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.230V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.230V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.21 3GPP TS 26.231**Global text telephony (GTT); Cellular text telephone modem minimum performance requirements**

This document specifies the minimum performance requirements for the GTT cellular text telephone modem.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.231V521-2006	5.2.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 6

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
ATIS	ATIS.3GPP.26.231V602-2006	6.0.2	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.26.231V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.22 3GPP TS 26.235**Packet switched conversational multimedia applications; Default codecs**

This document specifies the default codecs used for packet switched conversational multimedia applications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	T1.3GPP.26.235V510-2003	5.1.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.235V650-2007	6.5.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.235V740-2008	7.4.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.23 3GPP TS 26.244**Transparent end-to-end packet switched streaming service (PSS);3GPP file format (3GP)**

This document defines the 3GPP file format (3GP) as an instance of the ISO base media file format. The definition addresses 3GPP specific features such as codec registration and conformance within the MMS and PSS services. The 3GPP file format can contain timing, structure and media data for multimedia streams and is used by MMS and PSS for timed visual and aural multimedia.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.244V670-2008	6.7.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.244V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.24 3GPP TR 26.911**Codec for circuit switched multimedia telephony service; Terminal implementor's guide**

This document provides a guide to terminal implementors for multimedia telephony service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.26.911V340-2005	3.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx

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Rec. ITU-R M.1457-9

Release 5

ATIS	ATIS.3GPP.26.911V510-2005	5.1.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TR126 911 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 6

ATIS	ATIS.3GPP.26.911V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TR126 911 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

Release 7

ATIS	ATIS.3GPP.26.911V710-2006	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TR126 911 v7.1.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.25 3GPP TR 26.975

Performance characterization of the AMR codec

This document provides a performance characterization of the AMR codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.26.975V310-2003	3.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.26.975V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TR126 975 v5.0.0)	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.26.975V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TR126 975 v6.0.0)	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.26.975V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-440 as ETSI TR126 975 v7.0.0)	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.6.26 3GPP TS 28.062

Inband Tandem Free Operation (TFO); Stage 3

This document provides a stage 3 service description for inband vocoder tandem free operation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.62V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	ATIS.3GPP.28.062V550-2005	5.5.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.28.062V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.28.062V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.27 3GPP TS 43.050**Transmission Planning aspects of the speech service in GSM Public Land Mobile Network (PLMN)**

This document describes the transmission planning aspects for the speech service for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.03.50V811-2003	8.1.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.43.050V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.43.050V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.050V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.28 3GPP TS 46.001**Full rate speech processing functions**

This document defines speech processing functions for the full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.01V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.001V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.001V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.001V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.29 3GPP TS 46.002**Half rate speech processing functions**

This document defines speech processing functions for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.02V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.002V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.002V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.002V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.30 3GPP TS 46.006**Half rate speech; ANSI-C code for half rate speech codec**

This document provides the ANSI-C code for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.06V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.006V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.006V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.006V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.31 3GPP TS 46.007**Half rate speech; test sequences for half rate speech codec**

This document provides the test sequences for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.07V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.46.007V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.46.007V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.46.007V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.32 3GPP TS 46.008**Half rate speech; performance characterization of half rate speech codec**

This document provides the performance characterization for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.08V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.008V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.008V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.008V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.33 3GPP TS 46.010**Full rate speech transcoding**

This document provides the definition for speech transcoding for the full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.10V820-2003	8.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.010V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.010V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.010V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.34 3GPP TS 46.011**Substitution and muting of lost frames for Full Rate speech**

This document defines the error concealment functions for full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.11V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.011V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.011V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.011V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.35 3GPP TS 46.012**Comfort noise aspects for Full Rate speech traffic channels**

This document defines the comfort noise functions for the full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.12V810-2003	8.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.012V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.012V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.012V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.36 3GPP TS 46.020**Half rate speech transcoding**

This document provides the definition for speech transcoding for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.20V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.46.020V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.46.020V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.46.020V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.37 3GPP TS 46.021**Substitution and muting of lost frames for Half Rate speech This document defines the error concealment functions for half rate vocoder**

This document defines the error concealment functions for half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.21V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.021V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.021V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.021V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.38 3GPP TS 46.022**Comfort noise aspects for Half Rate speech traffic channels**

This document defines the comfort noise functions for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.22V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.022V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.022V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.022V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.39 3GPP TS 46.031**Discontinuous Transmission (DTX) for Full Rate speech traffic channels**

This document defines the discontinuous transmission function for the full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.31V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.031V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.031V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.031V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.40 3GPP TS 46.032**Voice Activity Detection (VAD) for full rate speech traffic**

This document defines the voice activity detection function for the full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.32V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.032V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.032V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.032V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.41 3GPP TS 46.041**Discontinuous Transmission (DTX) for Half Rate speech traffic channels**

This document defines the discontinuous transmission function for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.41V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.46.041V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.46.041V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.46.041V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.42 3GPP TS 46.042**Voice Activity Detection (VAD) for half rate speech traffic**

This document defines the voice activity detection function for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.42V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.042V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.042V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.042V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.43 3GPP TS 46.051**Enhanced full rate speech processing functions**

This document defines speech processing functions for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.51V820-2003	8.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.051V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATS.3GPP.46.051V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATS.3GPP.46.051V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.44 3GPP TS 46.053**Enhanced full rate speech; ANSI-C code for enhanced full rate speech codec**

This document provides the ANSI-C code for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.53V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.053V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.053V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.053V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.45 3GPP TS 46.054**Enhanced full rate speech; test sequences for enhanced full rate speech codec**

This document provides the test sequences for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.54V820-2003	8.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.054V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.054V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.054V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.46 3GPP TS 46.055**Enhanced full rate speech; performance characterization ofEFR speech codec**

This document provides the performance characterization for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.55V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.46.055V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.46.055V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.46.055V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.47 3GPP TS 46.060**Enhanced full rate speech transcoding**

This document provides the definition for speech transcoding for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.60V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.060V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.060V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.060V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.48 3GPP TS 46.061**Substitution and muting of lost frames for Enhanced full Rate speech channels**

This document defines the error concealment functions for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.61V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.061V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.061V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.061V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.49 3GPP TS 46.062**Comfort noise aspects for Enhanced full Rate speech traffic**

This document defines the comfort noise functions for the half rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.62V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.062V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.062V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.062V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.50 3GPP TS 46.081**Discontinuous Transmission (DTX) for Enhanced full Rate speech traffic channels**

This document defines the discontinuous transmission function for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.81V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.46.081V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.46.081V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.081V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.51 3GPP TS 46.082**Voice Activity Detection (VAD) for enhanced full rate speech traffic channels**

This document defines the voice activity detection function for the enhanced full rate vocoder.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.06.82V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.46.082V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.46.082V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.46.082V701-2008	7.0.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.52 3GPP TS 48.060**Inband control of remote transcoders and rate adaptors for EFR/FR**

This document defines inband control of remote transcoders and rate adaptors for enhanced full rate and full rate vocoders.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.08.60V821-2003	8.2.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.060V530-2007	5.3.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.060V610-2007	6.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.060V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.53 3GPP TS 48.061**Inband control of remote transcoders and rate adaptors; (half rate vocoders)**

This document defines inband control of remote transcoders and rate adaptors for half rate vocoders.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.61V810-2003	8.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.48.061V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.061V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.061V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.54 3GPP TS 26.171**AMR Wideband Speech Codec(AMR-WB); General Description**

This document provides an introduction to the set of AMR-Wideband specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.171V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.171V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.171V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.55 3GPP TS 26.173**ANSI-C code for AMR-Wideband (AMR-WB) Speech Codec**

This document contains an electronic copy of the ANSI_C code for the Adaptive Multi-Rate Wideband codec. The ANSI_C code is necessary for a bit exact implementation of the Adaptive Multi Rate Wideband speech transcoder (3GPP TS 26.190), Voice Activity Detection (3GPP TS 26.194), comfort noise (3GPP TS 26.192), source controlled rate operation (3GPP TS 26.193) and contains example solutions for substituting and muting of lost frames (3GPP TS 26.191).provides the ANSI-C code for the AMR-Wideband specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.173V5120-2007	5.12.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.173V630-2007	6.3.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.173V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.56 3GPP TS 26.174**Test sequences for AMR-Wideband (AMR-WB) Speech Codec**

This document provides the test sequences for the AMR-Wideband specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.174V540-2006	5.4.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.174V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.26.174V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.57 3GPP TS 26.190**AMR-Wideband (AMR-WB) Speech Transcoding**

This document provides the speech coding definition for the AMR-Wideband specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.190V510-2006	5.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.190V611-2006	6.1.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.190V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.58 3GPP TS 26.191**Error Concealment of erroneous or lost frames for AMR-Wideband (AMR-WB) speech codec**

This document provides the bad frame masking definition for the AMR-Wideband speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.191V510-2006	5.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.191V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.191V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.59 3GPP TS 26.192**Comfort noise aspects for AMR-Wideband (AMR-WB) speech codec**

This document provides the comfort noise definition for the AMR-Wideband speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.192V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.192V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.26.192V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.60 3GPP TS 26.193**Source rate controlled operation for AMR-Wideband (AMR-WB) speech codec**

This document provides the DTX definition for the AMR-Wideband speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.193V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.193V610-2007	6.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.193V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.61 3GPP TS 26.194**Voice Activity Detector for AMR-Wideband (AMR-WB) speech codec**

This document provides the VAD definition for the AMR-Wideband speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.194V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.194V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.194V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.62 3GPP TS 26.202**AMR-Wideband (AMR-WB) speech codec; Frame Structure**

This document provides the frame structure definition for the AMR-Wideband speech codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.201V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.201V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.26.201V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.63 3GPP TS 26.202**AMR-Wideband (AMR-WB) speech codec; Interface to Iu, Uu, and Nb**

This document provides the interface definition for the AMR-Wideband speech codec to Iu, Uu, and Nb interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.202V510-2006	5.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.202V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.202V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.64 3GPP TS 26.204**ANSI-C code for AMR-Wideband (AMR-WB) Speech Codec**

This document contains an electronic copy of the ANSI_C code for the Floating-point Adaptive Multi-Rate Wideband codec. This floating-point codec specification is mainly targeted to be used in multimedia applications or in packet-based applications. The bit-exact fixed-point ANSI-C code in 3GPP TS 26.173 remains the preferred implementation for all applications, but the floating-point codec may be used instead of the fixed-point codec when the implementation platform is better suited for a floating-point implementation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.204V540-2007	5.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.204V610-2007	6.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.204V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.65 3GPP TS 26.243**ANSI-C code for the fixed-point distributed speech recognition extended advanced front-end**

This document contains an electronic copy of the ANSI_C code for the Fixed-point Distributed Speech Recognition (DSR) Extended Advanced Front-end. The ANSI_C code is necessary for a bit exact implementation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.26.243V700-2009	7.0.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.6.66 3GPP TS 26.273**ANSI-C code for the fixed-point Extended AMR-Wideband (AMR-WB+) speech codec**

This document contains an electronic copy of the ANSI_C code for the Fixed-point Extended Adaptive Multi_Rate Wideband codec as an alternative to the floating-point ANSI-C code specified in 3GPP TS 26.304. The floating-point codec/encoder/decoder specified in this document or the floating-point codec/encoder/decoder specified in 3GPP TS 26.304 may be used depending on if the implementation platform is better suited for a floating-point or a fixed-point implementation.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.273V650-2008	6.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.273V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.67 3GPP TS 26.274**Speech codec speech processing functions; Extended AMR-Wideband (AMR-WB+) speech codec; Conformance testing**

This document provides the test sequences for the Extended AMR-Wideband (AMR-WB+) specifications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.274V630-2008	6.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.274V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.68 3GPP TS 26.290**Audio codec processing functions; Extended AMR-Wideband (AMR-WB+) speech codec; Transcoding functions**

This document describes the detailed mapping from input blocks of monophonic or stereophonic audio samples in 16 bit uniform PCM format to encoded blocks and from encoded blocks to output blocks of reconstructed monophonic or stereophonic audio samples. The coding scheme is an extension of the AMR-WB coding scheme and is referred to as extended AMR-WB or AMR-WB+ codec. It comprises all AMR-WB speech codec modes including VAD/DTX as well as extended functionality for encoding general audio signals such as music, speech, mixed, and other signals.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.290V630-2008	6.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.290V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.69 3GPP TS 26.304**Extended AMR-Wideband (AMR-WB+) codec; Floating-point ANSI-C code**

This document contains an electronic copy of the ANSI_C code for the Floating-point Extended Adaptive Multi-Rate Wideband codec as an alternative to the fixed-point ANSI-C code specified in 3GPP TS 26.273. The floating-point codec/encoder/decoder specified in this document or the fixed-point codec/encoder/decoder specified in 3GPP TS 26.273 may be used depending on if the implementation platform is better suited for a floating-point or a fixed-point implementation.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.26.304V660-2008	6.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.26.304V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.70 3GPP TS 26.401**General audio codec audio processing functions; Enhanced aacPlus general audio codec; General description**

This document describes the detailed mapping from an MPEG-4 bitstream containing Enhanced aacPlus coded audio to PCM sample output. The Enhanced aacPlus audio codec is based on the AAC, SBR and Parametric Stereo coding tools defined in the MPEG-4 Audio standard. In addition it includes further tools such as error concealment, spline resampler, and stereo-to-mono downmix. Also described is the detailed mapping from a PCM sample input to an MPEG-4 bitstream containing Enhanced aacPlus coded audio.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.26.401V620-2008	6.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.26.401V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.71 3GPP TS 26.402**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Additional decoder tools**

This document describes the error concealment algorithm, SBR parameter downmix and output resampling for the Enhanced aacPlus general audio codec.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.26.402V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.26.402V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.72 3GPP TS 26.403**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Encoder specification; Advanced Audio Coding (AAC) part**

This document describes the Advanced Audio Coding (ACC) waveform encoder part of the Enhanced aacPlus general audio codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.403V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.403V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.73 3GPP TS 26.404**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Encoder specification; Spectral Band Replication (SBR) part**

This document describes the Spectral Band Replication (SBR) high frequency reconstruction encoder part of the Enhanced aacPlus general audio codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.404V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.404V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.74 3GPP TS 26.405**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Encoder specification; Parametric stereo part**

This document describes the Parametric stereo encoder part of the Enhanced aacPlus general audio codec. The Parametric Stereo encoding tool estimates parameters characterizing the perceived stereo image of the input signal. These parameters are embedded in the SBR stream.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.405V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.405V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.75 3GPP TS 26.406**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Conformance testing**

This document specifies the digital test sequences and conformance criteria for the Enhanced aacPlus audio codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.406V630-2008	6.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.406V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.76 3GPP TS 26.410**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Floating-point ANSI-C code**

This document contains an electronic copy of the ANSI_C code for the Floating-point Enhanced aacPlus codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.410V690-2008	6.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.410V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.77 3GPP TS 26.411**General audio codec audio processing functions; Enhanced aacPlus general audio codec; Fixed-point ANSI-C code**

This document contains an electronic copy of the ANSI_C code for the Fixed-point Enhanced aacPlus codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.411V660-2008	6.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.411V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.78 3GPP TS 26.412**General audio codec audio processing functions; Source code for 3GP file format**

This document provides information on obtaining reference software for the 3GPP File Format.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.411V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.411V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.79 3GPP TR 26.902**Video codec performance**

This document contains a technical report on Video Codec Performance, for packet-switched video-capable multimedia services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.26.902V712-2008	7.1.2	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.80 3GPP TR 26.914**Multimedia telephony over IP Multimedia Subsystem (IMS); Optimization opportunities**

This document identifies opportunities for optimization of service quality and efficiency of Multimedia telephony over IP in a qualitative sense and provides the basis for developing a set of optional backward-compatible tools implementing such optimizations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.26.914V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.81 3GPP TR 26.935**Packet Switched (PS) conversational Multimedia applications; Performance characterisation of default codecs**

This document provides information on the performances of default speech codecs in packet switched conversational multimedia applications. The codecs under test are AMR-NB (Adaptive Multi-Rate Narrowband) and AMR-WB (Adaptive Multi-Rate Wideband). In addition, several ITU-T codecs (G.723.1, G.729, G.722 and G.711) are included in the testing. Experimental test results from the speech quality testing are reported to illustrate the behaviour of these codecs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.935V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.26.935V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.82 3GPP TR 26.936**Performance characterisation of 3GPP audio codecs**

This document contains a Technical Report for the Characterization of the 3GPP Audio Codecs, Enhanced aacPlus (Eaac+) and Extended AMR-WB (AMR-WB+), standardized by 3GPP in Release 6 for Packet-switched Streaming Service (PSS), Multimedia Messaging Service (MMS), Multimedia Broadcast and Multicast Service (MBMS), and IMS Messaging Service and Presence Service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.936V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.936V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.83 3GPP TR 26.943**Recognition performance evaluations of codecs for Speech Enabled Services (SES)**

This document provides information on the recognition performance of the DSR Extended Advanced Front End conducted by speech recognition vendors IBM and Scansoft for the selection of a codec for Speech Enabled Services. The performance results are provided both as absolute word error rates for DSR and AMR-NB/AMR-WB on a range of extensive evaluation databases and as relative word error rate reductions when compared to both the AMR-NB and AMR-WB codecs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.943V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.943V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.84 3GPP TR 26.946**Multimedia Broadcast/Multicast Service (MBMS) user service guidelines**

This document provides an overview of the MBMS System, and describes how the MBMS User Services use the MBMS Bearer Services and how MBMS user services can be built on top of the MBMS bearer service. The document describes the usage of the two delivery methods, streaming and download. Examples of applications using the download delivery method are news and software upgrades. Delivery of live music is an example of an application using the streaming delivery method.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.946V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.26.946V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.6.85 3GPP TR 26.976**Performance characterization of the AMR-Wideband (AMR-WB) codec**

This document provides a performance characterization of the AMR-Wideband codec.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.976V510-2006	5.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.976V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.976V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.86 3GPP TS 46.076**Adaptive Multi-Rate (AMR) speech codec; Study phase report**

This document provides a report of the study phase for the AMR speech codec which considers design and development issues such as AMR system functionality including working assumptions, requirements, the MS and network upgrades needed to support AMR, and risks and recommendations.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.46.076V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.46.076V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.6.87 3GPP TS 46.085**Subjective tests on the interoperability of the Half Rate / Full Rate / Enhanced Full Rate (HR/FR/EFR) speech codecs, single, tandem, and tandem free operation**

This document contains the results obtained from an internationally co-ordinated subjective evaluation conducted by four laboratories to estimate the performance in mobile-to-mobile connections of the GSM half, full, and enhanced full rate speech codecs (including the expected advantages of the Tandem Free Operation), in case of inter-operability in the digital cellular telecommunications system. These (listening-only) tests did not include the effects of Voice Activity Detector, Comfort Noise Insertion and the Discontinuous Transmission.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.46.085V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.46.085V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.7 Security**5.4.2.7.1 136-510****Authentication, encryption of signalling information/user data, and Privacy**

This part provides information on authentication for the digital control channel, analogue voice channel, analogue control channel, and digital traffic channel. It also provides a description of signalling message encryption and voice privacy and data privacy for TIA/EIA-136.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-510	B	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.7.2 136-511**Messages subject to encryption**

This part describes the messages which are subject to the encryption techniques described in TIA/EIA-136-510.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-511	A	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.7.3 3GPP TS 02.09**Security aspects**

This document provides a description of the security aspects for the GSM/EDGE system. Standalone security aspects for GSM GPRS are not specified beyond Release 4. For the latest available information see § 5.4.2.13.38.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.02.09V810-2007	8.1.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.7.4 3GPP TS 43.020**Security related network functions**

This document provides a description of the security functions employed for the GSM/EDGE system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.03.20V860-2008	8.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

604

Rec. ITU-R M.1457-9

Release 5

ATIS	ATIS.3GPP.43.020V540-2008	5.4.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.43.020V651-2008	6.5.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.43.020V731-2008	7.3.1	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.7.5 3GPP TS 29.109

Generic Authentication Architecture (GAA); Zh and Zn Interfaces based on the Diameter protocol; Stage 3

This document defines the Diameter based implementation for bootstrapping Zh interface (BSF_HSS) and GAA Application Zn interface (BSF-NAF) in Generic Authentication Architecture (GAA).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.29.109V690-2008	6.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.109V7110-2009	7.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.7.6 3GPP TS 41.033

Lawful interception requirements for GSM

This document provides a description of the requirements of lawful interception functions employed for the GSM/EDGE system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.41.033V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.41.033V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.7 3GPP TS 43.033

3G security; Lawful interception; Stage 2

This document provides a stage 2 description of the lawful interception functions employed for the GSM/EDGE system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.43.033V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 6

ATIS	ATIS.3GPP.43.033V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.43.033V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.7.8 3GPP TS 33.203**3G security; Access security for IP-based services**

This document specifies the security features and mechanisms for secure access to the IM subsystem (IMS) for the 3G mobile telecommunication system. This specification only deals with how the SIP signalling is protected between the subscriber and the IMS, how the subscriber is authenticated and how the subscriber authenticates the IMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.33.203V6110-2008	6.11.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.33.203V790-2008	7.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.9 3GPP TS 33.204**3G security; Network Domain Security (NDS); Transaction Capabilities Application Part (TCAP) user security**

This document specifies the security mechanisms and procedures necessary to protect all TCAP user messages which are sent between different security domains. The complete set of enhancements and extensions to facilitate security protection for the TCAP protocol is termed TCAPsec and it covers transport security in the TCAP protocol itself and the security management procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.33.204V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.10 3GPP TS 33.210**3G security; Network Domain Security (NDS); IP network layer security**

This document defines the security architecture for network domain IP based control planes, which shall be applied to NDS/IP-networks (i.e. 3GPP and fixed broadband networks). The scope of network domain control plane security is to cover the control signalling on selected interfaces between network elements of NDS/IP networks.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.33.210V660-2008	6.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.33.210V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.7.11 3GPP TS 33.220**Generic Authentication Architecture (GAA); Generic bootstrapping architecture**

This document describes the security features and a mechanism to bootstrap authentication and key agreement for application security from the 3GPP AKA mechanism.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.33.220V6130-2007	6.13.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.33.220V7110-2008	7.11.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.12 3GPP TS 33.221**Generic Authentication Architecture (GAA); Support for subscriber certificates**

This document describes subscriber certificate distribution by means of generic bootstrapping architecture.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.33.221V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.33.221V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.13 3GPP TS 33.222**Generic Authentication Architecture (GAA); Access to network application functions using Hypertext Transfer Protocol over Transport Layer Security (HTTPS)**

This document specifies secure access methods to Network Application Functions (NAF) using HTTP over TLS in the Generic Authentication Architecture (GAA), and provides Stage 2 security requirements, principles and procedures for the access.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.33.222V660-2007	6.6.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.33.222V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.14 3GPP TS 33.259**Key establishment between a UICC hosting device and a remote device**

This document describes the security features and mechanisms to provision a shared key between a UICC Hosting Device and a Remote Device connected via a local interface. The shared secret is then intended to be used to secure the interface between the Remote Device and the UICC hosting device.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.33.259V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.15 3GPP TR 33.801**Access Security review**

This document presents an analysis of the potential vulnerabilities and vulnerabilities coming from the use of GSM security context and threats coming from the re-use (transfer) of a security context between GSM and UMTS (and other access networks) in the absence of particular security features such as strong encryption algorithms, network authentication, key separation, etc. Interaction between GERAN/UTRAN/other access during hand-over is also considered.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.33.905V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.16 3GPP TR 33.802**Feasibility study on IMS security extensions**

This document presents a study of security requirements and solutions related fixed broadband access to IMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.33.919V620-2007	6.2.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.33.919V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.17 3GPP TR 33.905**Recommendations for Trusted Open Platforms**

This document presents This technical report investigates relevant trust standards and technologies for securing the storage, processing, and input and output of sensitive data on an open platform and also, isolation of applications that are managing (U)SIMs and (U)SIM readers, EAP-SIM and EAP-AKA protocols, and

SAP applications from untrusted applications. Recommendations are given for trusted open platforms for delivery of new applications and services to open platforms.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 7 ATIS ATIS.3GPP.33.980V760-2008	7.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.7.18 3GPP TS 33.919

3G Security; Generic Authentication Architecture (GAA); System description

This document gives an overview of the different mechanisms that mobile applications can rely upon for authentication between server and client (i.e. the UE). Additionally it provides guidelines related to the use of GAA and to the choice of authentication mechanism in a given situation and for a given application.

5.4.2.7.19 3GPP TR 33.980

Liberty Alliance and 3GPP security interworking; Interworking of Liberty Alliance Identity Federation Framework (ID-FF), Identity Web Services Framework (ID-WSF), and Generic Authentication Architecture (GAA)

This document provides guidelines on the interworking of the Generic Authentication Architecture (GAA) and the Liberty Alliance architecture. The document studies the details of possible interworking methods between the Security Assertion Markup Language v2.0, SAML v2.0 (or alternatively the Liberty Alliance Identity Federation Framework, ID-FF), the Identity Web Services Framework (ID-WSF), the Security Assertion Markup Language (SAML) and a component of GAA called the Generic Bootstrapping Architecture (GBA).

5.4.2.8 Teleservice transport

5.4.2.8.1 136-610

R-DATA/SMDPP transport

This part describes the transport of TIA/EIA-136 teleservice messages using a combination of the R-DATA message air interface transport and the TIA/EIA-41 SMDPP transport.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
TIA TIA/EIA-136-610	B	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.8.2 136-620**Teleservice segmentation and reassembly (TSAR)**

This part describes teleservice segmentation and reassembly (TSAR). TSAR provides a mechanism to deliver TIA/EIA-136 teleservice messages that are not constrained by any message length limitations imposed by the air interface, or network layers supporting the teleservice. The service consists of the application of segmentation and reassembly, and retransmission of errored segments.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-620	A	Published ANS	04/05/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.8.3 136-630**Broadcast teleservice transport – Broadcast air-interface transport service (BATS)**

This part describes a broadcast teleservice transport. The BATS teleservice transport operates between a teleservice server and MS using both TIA/EIA-136 and TIA/EIA-41 based protocol stacks along with relay functions in the BS, mobile switching centre and interworking function. BATS is a general-purpose broadcast transport mechanism that can be used by existing teleservices as well as other future teleservices/applications requiring broadcast transport support.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-630	0	Published ANS	29/11/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.8.4 136-670**Teleservice over GSM SMS (TOGS)**

This part describes support of TIA/EIA-136 teleservices over a GSM Short Message Service delivery mechanism.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-670	0	Published ANS	23/05/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9 Teleservices**5.4.2.9.1 136-700****Introduction to teleservices**

This part provides an introduction to TIA/EIA-136 based teleservices including the teleservice protocol stack, transport, and higher layer protocol identifiers.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-700	D	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.2 136-710**Short message service – Cellular messaging teleservice**

This part describes the procedures, message set, and information elements necessary to provide short message service in TIA/EIA-136 based systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-710	C	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.3 136-711**GSM Hosted SMS Teleservice (GHOST)**

This part describes the procedures, message set, and information elements necessary to deliver GSM SMS Protocol Data Units (PDUs) to and from a mobile station operating in a TIA/EIA-136 network.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-711	0	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.4 136-720**Over-the-air activation teleservice (OATS)**

This part describes a teleservice that is designed to support over-the-air activation (OTA). The over-the-air activation teleservice (OATS) supports data exchange between a MS and a customer service centre (CSC)/over-the-air activation function (OTAF) which enables downloading information to the MS number assignment module.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-720	C	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.5 136-730**Over-the-air programming teleservice (OPTS)**

This part describes a teleservice that is designed to support downloading of non-NAM programming information (e.g. intelligent roaming database or IRDB) to an MS. The over-the-air programming teleservice (OPTS) provides a sequence of messages exchanged between the over-the-air service provisioning function (OTASP) and the MS for the delivery of information.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-730	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.6 136-740**System Assisted Mobile Positioning through Satellite (SAMPS)**

This part describes a teleservice that facilitates the exchange of information between a network entity and a mobile station to provide geographic positioning.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-740	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.7 136-741**System Assisted Mobile Positioning through Satellite (SAMPS) in Analog Systems**

This part describes the procedures, signalling, and transport on analogue channels (ACC, AVC) that facilitates the exchange of information between a network entity and a mobile station to provide geographic positioning.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-741	0	Published ANS	22/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.8 136-750**General UDP transport service (GUTS)**

This part describes the general UDP transport service (GUTS), which is a teleservice to support the transport of user datagram protocol (UDP) PDUs between a teleservice server and an MS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-750	0	Published ANS	29/11/1999	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.9 136-760**Charge indication teleservice (CIT)**

This part describes a teleservice that is designed to provide the MS user with charge information for a call.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-760	A	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.10 3GPP TS 22.011**Service Accessibility**

This document describes the service access procedures as presented to the user.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.22.011V380-2003	3.8.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.22.011V510-2003	5.1.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.22.011V640-2006	6.4.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.22.011V790-2008	7.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.9.11 3GPP TS 23.032**Universal Geographical Area Description (GAD)**

This document describes the data used by the location services positioning procedures.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.032V321-2005	3.2.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-740 as ETSI TS 123 032 v3.1.0)	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	T1.3GPP.23.032V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.032V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.032V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.9.12 3GPP TS 23.039**Interface protocols for connection of SMS service centers (SMSCs) to Short message entities**

This document provides the description of the protocols between the Short Message Service Centers and the SMS entities utilizing SMS.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.039V320-2003	3.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.23.039V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
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5.4.2.9.13 3GPP TS 23.040**Technical realization of the Short Message Service (SMS)**

This document provides the overall description for the Short Message Service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.040V3110-2008	3.11.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 040 v3.4.1	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.23.040V590-2008	5.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 040 v5.8.1	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.23.040V690-2008	6.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 040 v6.8.1	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.23.040V720-2009	7.2.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 123 040 v7.2.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.14 3GPP TS 23.041**Technical realization of the Cell Broadcast Service (CBS)**

This document provides the overall description for the cell broadcast Service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.041V350-2003	3.5.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.23.041V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.041V620-2006	6.2.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.041V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.9.15 3GPP TS 23.042**Compression algorithm for SMS**

This document provides the description of the compression algorithm used for the short message service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.042V310-2002	3.1.0	Approved	03/05/2002	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.23.042V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.042V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.042V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.9.16 3GPP TS 24.011**Point-to-Point Short Message Service (SMS) support on mobile radio interface**

This document provides the specification for support for the Short Message Service on the 200 kHz mobile radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.24.011V360-2001	3.6.0	Approved	01/03/2001	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 124 011 v3.2.0	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 5					
ATIS	ATIS.3GPP.24.011V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 124 011 v5.2.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 6					
ATIS	ATIS.3GPP.24.011V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 124 011 v6.1.0	B	Approved	26/04/2006	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.24.011V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 124 011 v7.0.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.17 3GPP TS 26.140**Multimedia Messaging Service (MMS); Media formats and codes**

This document provides the specification of the media formats and codes for the Multimedia Messaging Service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.26.140V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.26.140V630-2007	6.3.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.140V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.9.18 3GPP TS 32.005**Call and Event data for circuit switched domain**

This document provides the Release 99 description for the charging data for the circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.32.005V370-2005	3.7.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx

5.4.2.9.19 3GPP TS 32.205**Charging data description for circuit switched domain**

This document provides the Release 5 description for the charging data for the circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.32.205V590-2006	5.9.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

5.4.2.9.20 3GPP TS 32.015**Call and Event data for packet switched domain**

This document provides the Release 99 description for the charging data for the packet switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.32.015V3120-2005	3.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 132 015 v3.1.1	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.21 3GPP TS 32.215**Charging data description for packet switched domain**

This document provides the Release 5 description for the charging data for the packet switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.32.215V590-2006	5.9.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 132 215 v5.7.0	A-1(E)	Published ANS	03/06/2005	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.22 3GPP TS 44.012**Short Message Service Cell Broadcast (SMSCB) support on mobile radio interface**

This document provides the specification for support for the cell broadcast Short Message Service on the 200 kHz mobile radio interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.04.12V800-2003	8.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.44.012V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.012V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.012V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.9.23 3GPP TS 22.246**Multimedia Broadcast/Multicast Service (MBMS) user services; Stage 1**

This document provides stage 1 description for the Multimedia Broadcast and Multicast service functions.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.22.246V630-2007	6.3.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 246 v6.3.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.22.246V740-2009	7.4.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 122 246 v7.4.0	C-1(E)	In public review	05/06/2009	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.9.24 3GPP TR 22.903**Study on Videotelephony teleservice**

This document provides an analysis of the introduction of additional functionalities for the videotelephony service in addition to what is provided in the 3GPP specifications up to Release 6. The functionalities will include but are not limited to codec negotiation, charging principles, supplementary services support.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.903V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.9.25 3GPP TS 24.247**Messaging using the IP Multimedia (IM) Core network (CN) Subsystem; Stage 3**

This document provides detailed specifications for messaging using the IMS Core network.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.247V6100-2009	6.10.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.24.247V740-2009	7.4.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.9.26 3GPP TS 24.341**Support of SMS over IP networks**

This document provides the protocol details for SMS over IP within the IP Multimedia (IM) Core Network (CN) subsystem based on the Session Initiation Protocol (SIP) and SIP Events.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.24.341V730-2009	7.3.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.9.27 3GPP TR 25.992**Multimedia Broadcast/Multicast Service (MBMS); UTRAN/GERAN requirements**

This document provides the requirements for introducing the Multimedia Broadcast and Multicast service in UTRAN and GERAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.24.992V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.24.992V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.9.28 3GPP TS 43.246**Multimedia Broadcast/Multicast Service (MBMS) in GERAN; Stage 2**

This document provides stage 2 description for the Multimedia Broadcast and Multicast service functions in GERAN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.43.246V6100-2007	6.10.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.246V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.9.29 3GPP TS 26.141**IP Multimedia System (IMS) Messaging and Presence; Media formats and codecs**

This document defines the minimal baseline and optional media codecs and message container format to be used by IMS Messaging and associated Presence service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.26.141V630-2007	6.3.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.26.141V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.10 Annexes/Appendices**5.4.2.10.1 136-900****Introduction to Annexes and Appendices**

This part contains information concerning the 900 series of parts which contain additional normative and informative information related to the TIA/EIA-136 standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-900	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.10.2 136-905**Normative information**

This part contains additional normative information related to the TIA/EIA-136 standard.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-905	A	Published ANS	13/01/2004	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.10.3 136-910**Informative information**

This part provides additional informative information to aid the user to understand the use or application of the TIA/EIA-136 standard. Information such as frame formats, calculation of R-DATA message lengths and addressing is provided.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-910	C	Published ANS	15/04/2002	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.10.4 136-932**Packet-data service – Stage 2 description**

This informative part of TIA/EIA-136 contains stage 2 descriptions for the GPRS-136 packet data service. It describes the main traffic scenarios and the message flows between different network elements.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-932	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.10.5 136-933**Packet-data service – Fixed coding mode MAC**

This part describes the fixed-coding mode of the 136+ medium access control (MAC) function specified in TIA/EIA-136-332. Higher layers may use the MAC to transport data across a GPRS_136 radio interface using the 136+ bearer.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-933	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.10.6 136-940**Capacity and performance characteristics of UWC-136**

This informative part contains additional information concerning the voice capacity, spectrum efficiency, and throughput performance for the UWC-136 system.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-940	0	Published ANS	31/03/2000	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.10.7 136-972**Enhanced General Packet Data Service (EGPRS-136) Stage 2 Description**

This informative part provides a Stage-2 description of the Enhanced General Packet Data Service (EGPRS-136).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
TIA	TIA/EIA-136-972	0	Published ANS	23/04/2001	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.11 Other Procedures and Signaling**5.4.2.11.1 3GPP TS 23.007****Restoration procedures**

This document describes the restoration procedures for the Location Register (HLR or VLR) data.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.007V360-2005	3.6.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.23.007V510-2005	5.1.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.007V640-2009	6.4.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.007V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.2 3GPP TS 23.008**Organization of subscriber data**

This document describes the organization of the subscriber data stored in the HLR, VLR, or GSNs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.008V380-2005	3.8.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.23.008V5130-2007	5.13.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.008V6140-2007	6.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.008V7100-2009	7.10.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.3 3GPP TS 23.009**Handover Procedures**

This document describes the procedures for handover from cell to cell.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.009V3140-2005	3.14.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.23.009V5120-2009	5.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.009V650-2009	6.5.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.009V711-2009	7.1.1	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.4 3GPP TS 23.012**Location Management Procedures**

This document describes the procedures involving HLR, VLR, and MSC location management.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.012V330-2000	3.3.0	Approved	01/06/2000	https://www.atis.org/docstore/default.aspx

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Rec. ITU-R M.1457-9

Release 5

ATIS	ATIS.3GPP.23.012V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.23.012V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.23.012V730-2008	7.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.11.5 3GPP TS 23.014

Support of DTMF signalling

This document describes the support of Dual Tone Multi Frequency (DTMF) signalling.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.014V320-2003	3.2.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.23.014V510-2003	5.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.014V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.014V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.6 3GPP TS 23.018

Basic Call handling; Technical realization

This document describes technical realization of basic call handling.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.23.018V3120-2005	3.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.23.018V5100-2007	5.10.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.018V660-2007	6.6.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.018V770-2009	7.7.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.7 3GPP TS 23.108**Mobile radio interface layer 3 protocols; Stage 2**

This document provides a stage 2 functional description of the layer 3 protocols for call control, mobility management, and session management.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.23.108V320-2000	3.2.0	Approved	01/03/2000	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.23.108V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.108V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.108V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.11.8 3GPP TS 27.005**Use of DTE-DCE interface for SMS and cell broadcast service**

This document provides specification of the DTE-DCE interface for use with SMS and cell broadcast services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.27.005V320-2003	3.2.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.27.005V501-2006	5.0.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.27.005V601-2006	6.0.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.27.005V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.11.9 3GPP TS 27.007**AT command set for User Equipment (UE)**

This document provides specification of the AT command set for user equipment.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.27.007V3130-2005	3.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	ATIS.3GPP.27.007V560-2006	5.6.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.27.007V690-2007	6.9.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.27.007V750-2009	7.5.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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5.4.2.11.10 3GPP TS 27.010**Terminal Equipment to User Equipment (TE-UE) Multiplexer protocol**

This document provides specification of the multiplexer protocol for the TE to UE interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.27.010V340-2002	3.4.0	Approved	03/05/2002	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.27.010V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.27.010V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.27.010V700-2007	7.0.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx

5.4.2.11.11 3GPP TS 27.103**Wide area network synchronization**

This document provides specification of the wide area network synchronization.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.27.103V310-2003	3.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.27.103V500-2003	5.0.0	Approved	27/03/2003	https://www.atis.org/docstore/default.aspx

5.4.2.11.12 3GPP TS 22.173**IP Multimedia subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1**

This document defines the IMS Multimedia Telephony service and the minimum set of capabilities required to secure multi-vendor and multi-operator interoperability for Multimedia Telephony and related Supplementary Services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.173V750-2008	7.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.13 3GPP TS 22.228**Service requirements for the IP Multimedia subsystem (IMS); Stage 1**

This document provides the requirements for the IP Multimedia subsystem.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.22.228V6110-2007	6.11.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.22.228V760-2008	7.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.14 3GPP TR 22.935**Feasibility study on Location Services (LCS) for Wireless Local Area Network (WLAN)**

This feasibility study provides analysis for a generic interworking functionality for LCS between 3GPP system and WLAN systems (e.g. IEEE 802.11 family, HIPERLAN/2, ...).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.935V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.15 3GPP TR 22.936**Multi-system terminals**

This document studies the behaviour of a multi system terminal that supports both 3GPP and non-3GPP systems. Particular issues analyzed include: whether the system selection or PLMN selection should take higher priority in a multi system terminal; criteria and methods of system change; and interaction between user's and operator's preferences.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.936V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.16 3GPP TR 22.953**Multimedia priority service feasibility study**

This feasibility study provides an analysis of the Multimedia Priority Service which allows qualified and authorized users to obtain priority access to the next available radio channel on a priority basis before other PLMN users during situations when PLMN congestion is blocking session establishment attempts. In addition, Multimedia Priority Service supports priority sessions on an "end-to-end" priority.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.953V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.17 3GPP TR 22.967**Transferring of emergency call data**

This examines the issues associated with the transmission of Emergency Call Data from a vehicle to a Public Service Access Point (PSAP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.967V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.18 3GPP TR 22.973**IMS Multimedia Telephony service; and supplementary services**

This document defines the IMS Multimedia Telephony service and associated supplementary services for IMS. The objective is to define the minimum set of capabilities required in the IP Multimedia Subsystem to secure multi-vendor and multi-operator inter-operability for the IMS Multimedia Telephony service and related Supplementary Services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.22.973V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.19 3GPP TR 22.979**Feasibility study on combined Circuit Switched (CS) calls and IP Multimedia Subsystem (IMS) sessions**

This document studies the service requirements associated with a multimedia service combining a CS call with one or more IMS services (or vice versa), while appearing as a single service to both end-users. The feasibility study addresses the high-level requirements and use cases such for combinational service including charging and user experience.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 7				
ATIS ATIS.3GPP.22.979V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.20 3GPP TS 23.002**Network Architecture**

This document provides an overall network architecture description for the PLMN.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.23.002V6100-2006	6.10.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.23.002V760-2009	7.6.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.21 3GPP TS 23.053**Tandem Free Operation (TFO); Service description; Stage 2**

This document specifies the stage 2 description of tandem free operation for speech calls.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.23.053V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.23.053V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.22 3GPP TS 23.067**Enhanced Multi-Level Precedence and Pre-emption Service (eMLPP); Stage 2**

This document specifies the stage 2 description of the enhanced Multi-Level Precedence and Pre-emption Service (eMLPP) which provides different call priorities in combination with fast call set-up and pre-emption for different applications.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.23.067V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.067V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.23 3GPP TS 23.107**Quality of Service (QoS) concept and architecture**

This document provides overall framework and architecture for the provision of Quality of Service in UTRAN/GERAN systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.23.107V5130-2006	5.13.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.107V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.107V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.24 3GPP TS 23.203**Policy and charging control architecture**

This document provides full harmonization and merger of enhanced policy control to allow service based QoS policy control for GPRS access for session based PS applications and IP flow control based charging to allow more granularity for end-user charging, accounting and online credit control.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.23.203V7110-2009	7.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.25 3GPP TS 23.206**Voice Call Continuity (VCC) between Circuit Switched (CS) and IP Multimedia Subsystem (IMS); Stage 2**

This document provides a stage 2 service description of the Voice Call Continuity function which provides the capability to transfer the path of an existing voice call between a 3GPP CS system (GSM/UMTS) and IMS, and vice versa.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 7					
ATIS	ATIS.3GPP.23.206V750-2008	7.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.26 3GPP TS 23.207**End-to-End Quality of Service (QoS) concept and architecture**

This document provides a framework for the provision of end-to-end Quality of Service in UTRAN/GERAN systems.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.23.207V660-2006	6.6.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.207V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.27 3GPP TS 23.218**IP Multimedia (IM) session handling; IM call model; Stage 2**

This document provides a stage 2 description of the IP Multimedia call model for origination and termination of an IP Multimedia session.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.23.218V590-2007	5.9.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.218V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.218V790-2008	7.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.28 3GPP TS 23.279**Combining Circuit Switched (CS) and IP Multimedia Subsystem (IMS) services; Stage 2**

This document provides a stage 2 service description of the architectural details to combine CS services and IMS services for using them in parallel between the same two users in a peer-to-peer context.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 7				
ATIS ATIS.3GPP.23.279V770-2008	7.7.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.29 3GPP TR 23.809**One Tunnel Functional description**

This document provides a stage-2 like description of an architecture that uses direct tunnelling of user plane data between the RNC and the GGSN, which is known as One Tunnel approach. This architecture when complete will be moved into 3GPP Technical Specification TS.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 7				
ATIS ATIS.3GPP.23.840V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.30 3GPP TR 23.818**Optimisations and Enhancements for Realtime IMS Communication**

This document provides the results of a study into potential system optimisations and enhancements required for mass market realtime communication. While the efficient transport of voice over the air interface is a major catalyst for the development cellular IP multimedia telephony, some further system aspects (such as definition of supplementary services for multimedia telephony; consideration to call establishment time, and interference of an ongoing telephony call due to other services; handling of the loss of the signalling PDP context) are required in order to provide an efficient and inter-operable service.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 7				
ATIS ATIS.3GPP.23.919V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.31 3GPP TR 23.837**Location Services (LCS) architecture for 3GPP system – Wireless Local Area Network (WLAN) interworking**

This document investigates solutions for providing LCS over 3GPP WLAN interworking architecture. The architectural requirements and different possible LCS architectures to provide the location services over I-WLAN are analyzed. The procedures to obtain the location information of a WLAN UE attached to I-WLAN network are also studied. The LCS aspects for I-WLAN as IP-CAN in the IMS Emergency call, i.e., the emergency location information handling for I-WLAN are also described.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 5				
ATIS ATIS.3GPP.24.067V500-2006	5.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6				
ATIS ATIS.3GPP.24.067V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.24.067V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.32 3GPP TR 23.840**Study into routing of MT-SMs via the HPLMN**

This document provides a study into the current core network architecture for inter-PLMN short message delivery and provides a study into how such an architecture can be improved for the modern day. Wherever possible, backwards compatibility is maintained and impacts are only upon the home network of the destined subscriber.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.24.141V6110-2009	6.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.24.141V760-2009	7.6.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.33 3GPP TR 23.919**Direct tunnel deployment guidelines**

This document provides the deployment guidelines for the use of direct tunnelling of user plane data between the RNC and the GGSN (earlier known as the One Tunnel approach). These guidelines highlight the impacts of the 3GPP Release 7 Direct Tunnel solution to the current UMTS system in order to guide equipment development and network deployment.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.24.147V690-2008	6.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

Release 7

ATIS	ATIS.3GPP.24.147V7100-2009	7.10.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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5.4.2.11.34 3GPP TS 24.067**Enhanced Multi-level Precedence and Pre-emption service (eMLPP); Stage 3**

This document specifies the procedures used at the radio interface for normal operation, invocation, registration and interrogation of the enhanced Multi-Level Precedence and Pre-emption Service (eMLPP) supplementary service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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Release 7

ATIS	ATIS.3GPP.24.206V750-2008	7.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.11.35 3GPP TS 24.141**Presence service using the IP Multimedia subsystem (IMS); Stage 3**

This document provides detailed protocol description of the operation of the presence service within the IMS based on the session initiation protocol (SIP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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Release 5

ATIS	ATIS.3GPP.24.229V5220-2009	5.22.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.24.229V6220-2009	6.22.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.24.229V7160-2009	7.16.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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5.4.2.11.36 3GPP TS 24.147**Conferencing using the IP Multimedia subsystem (IMS); Stage 3**

This document provides detailed protocol description of the operation of the conferencing service within the IMS based on the session initiation protocol (SIP).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
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Release 7

ATIS	ATIS.3GPP.24.305V740-2009	7.4.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
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5.4.2.11.37 3GPP TS 24.206**Voice Call Continuity (VCC) between Circuit Switched (CS) and IP Multimedia Subsystem (IMS); Stage 3**

This document provides the stage 3 details of the Voice Call Continuity function which provides the capability to transfer the path of an existing voice call between a 3GPP CS system (GSM/UMTS) and IMS, and vice versa.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 7				
ATIS ATIS.3GPP.24.930V750-2008	7.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.38 3GPP TS 24.229**IP Multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3**

This document defines a call control protocol for the IP Multimedia subsystem based on the Session Initiation Protocol and the associated Session Description Protocol.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.27.001V630-2008	6.3.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.27.001V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.39 3GPP TS 24.305**Selective Disabling of UE Capabilities (SDoUE) Management Object (MO)**

This document specifies a mobile device Selective Disabling of UE Capabilities (SDoUE) Management Object (MO) and the rules and corresponding behaviour of the UE with regard to the selective disabling of UE capabilities, for example, when services or functions are disabled/enabled.

SDO (2) Document No.	Version	Status	Issued date	Location (1)
Release 6				
ATIS ATIS.3GPP.27.002V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7				
ATIS ATIS.3GPP.27.002V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.40 3GPP TR 24.930**Signalling flows for the session setup in the IP Multimedia Subsystem (IMS) based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3**

This document specifies the signalling flows for session setup for the IP Multimedia subsystem based on the Session Initiation Protocol and the associated Session Description Protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.27.003V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.27.003V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.41 3GPP TS 27.001**General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)**

This document provides a general description of Terminal Adaptation Functions based on the principles of terminal adaptor functions presented in the ITU-T I-series of Recommendations (I.460 to I.463).

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.29.007V640-2008	6.4.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.007V740-2008	7.4.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.42 3GPP TS 27.002**Terminal Adaptation Functions (TAF) for services using Asynchronous bearer capabilities**

This document defines the interfaces and Terminal Adaptation Functions (TAF) integral to a Mobile Termination (MT) which enables the use of asynchronous bearer services in the PLMN and the attachment of asynchronous terminals to a MT.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.061V591-2006	5.9.1	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.061V6150-2009	6.15.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.061V7100-2009	7.10.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.43 3GPP TS 27.003**Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities**

This document defines the interfaces and Terminal Adaptation Functions (TAF) which are integrated in a Mobile Termination (MT) which enables the use of synchronous bearer services in the PLMN and the attachment of synchronous terminals to a MT.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.29.162V620-2006	6.2.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.162V730-2009	7.3.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.44 3GPP TS 29.007**General requirements on Interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)**

This document identifies the Mobile_services Switching Centre/Interworking Functions (MSC/IWFs) and requirements to support interworking between the PLMN and the ISDN.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.29.163V6120-2009	6.12.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.163V7150-2009	7.15.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.45 3GPP TS 29.061**Interworking between the Public Land Mobile Network (PLMN) and supporting packet based services and Packet Data Networks (PDN)**

This document defines the requirements for packet domain interworking between PLMNs or between PLMNs and PDNs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.228V5200-2007	5.20.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.228V6150-2007	6.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.228V7110-2009	7.11.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.46 3GPP TS 29.162**Interworking between the IMS and IP networks**

This document details the interworking between the IMS and external IP networks for IP Multimedia service support.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.229V5130-2007	5.13.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.229V6100-2007	6.10.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.229V780-2009	7.8.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.47 3GPP TS 29.163**Interworking between the IMS and Circuit Switched (CS) networks**

This document specifies the principles of interworking between the IMS and legacy CS networks in order to support IP Multimedia basic voice calls.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.29.230V6100-2007	6.10.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.230V7130-2009	7.13.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.48 3GPP TS 29.228**IP Multimedia Subsystem Cx and Dx Interfaces; Signalling flows and message contents**

This document addresses the signalling flows for the Cx and Dx interfaces.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.29.278V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.278V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.49 3GPP TS 29.229**Cx and Dx Interfaces based on the Diameter protocol; Protocol details**

This document provides the protocol details for the Cx and Dx interfaces using the Diameter protocol.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.328V5150-2007	5.15.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.328V6140-2007	6.14.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.328V7100-2009	7.10.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.50 3GPP TS 29.230**Diameter applications; 3GPP specific codes and identifiers**

This document lists the 3GPP specific Diameter protocol codes, including the AVP codes and Experimental result codes. This document lists also the application identifiers assigned to 3GPP specific Diameter applications by IANA and the Diameter command code range which is assigned to 3GPP by IANA.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.29.329V5110-2006	5.11.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.329V670-2007	6.7.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.329V780-2009	7.8.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.11.51 3GPP TS 29.278**Customized Applications for Mobile Network Enhanced Logic (CAMEL); CAMEL Application Part (CAP) specification for IP Multimedia subsystem (IMS)**

This document specifies the CAMEL Application Part (CAP) for support of the IP Multimedia Subsystem.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.43.129V6120-2007	6.12.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.129V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.52 3GPP TS 29.328**IP Multimedia subsystem (IMS) Sh interface; Signalling flows and message contents**

This document specifies the Sh and the Dh interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.43.318V6120-2008	6.12.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.43.318V750-2008	7.5.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.53 3GPP TS 29.329**Sh interface based on the Diameter protocol; Protocol details**

This document specifies a transport protocol for use by the IP Multimedia Subsystem based on Diameter for the Sh interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.44.318V6120-2008	6.12.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.44.318V770-2008	7.7.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.11.54 3GPP TS 43.129**Packet-switched handover for GERAN A/Gb mode; Stage 2**

This document provides the stage 2 description for packet domain handover for the GERAN operating in A/Gb mode.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.44.901V510-2006	5.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.44.901V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 129 v6.12.0	B-1(E)	Approved	28/01/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm
Release 7					
ATIS	ATIS.3GPP.44.901V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
TIA	Included in TIA/EIA-136-370 as ETSI TS 143 129 v7.2.0	C	Approved	21/10/2008	http://www.tiaonline.org/standards/technology/uwc136/disclaimer.cfm

5.4.2.11.55 GPP TS 43.318**Generic access to the A/Gb interface; Stage 2**

This document describes the overall architecture for Generic Access (GA) to the A/Gb interfaces. It describes the system concepts, documents the reference architecture, functional entities, network interfaces, and high-level procedures of GA.

5.4.2.11.56 3GPP TS 44.318**Generic access to the A/Gb interface; Mobile GA interface layer 3 specification**

This document describes the procedures used over a generic access interface, namely the Up interface. It specifies the handling of secure connection, Discovery and Registration, CS domain and PS domain signalling and voice and data. These procedures are defined in terms of messages exchanged over a generic access interface.

5.4.2.11.57 3GPP TR 44.901**External Network Assisted Cell Change (NACC)**

This document provides background information, motivations, concepts and requirements regarding an extended Network Assisted Cell Change (NACC) feature for external cell change.

5.4.2.12 Intra-RAN**5.4.2.12.1 3GPP TS 29.010****Information Element Mapping between MS-BSS and BSS-MSC signalling procedures and the mobile application part (MAP)**

This document describes the mapping between information elements used for signalling between MS and BSS and signalling between BSS and MSC and the MAP.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.29.010V3120-2005	3.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.29.010V570-2005	5.7.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.010V690-2007	6.9.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.010V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.2 3GPP TS 29.078**Customized Applications for Mobile network Enhanced Logic (CAMEL); CAMEL application part (CAP) specification**

This document contains the CAMEL application part (CAP) specification.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.29.078V3150-2005	3.15.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.29.078V590-2005	5.9.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.29.078V650-2007	6.5.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.29.078V740-2008	7.4.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.3 3GPP TS 48.001**General aspects on the BSS-MSC interface**

This document describes the general aspects of the BSS-MSC interface for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.01V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.001V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.001V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.001V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.4 31GPP TS 48.002**Base Station System – Mobile Services Switching Centre (BSS-MSC) Interface – Interface principles**

This document describes the general principles of the BSS-MSC interface for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.02V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.48.002V510-2003	5.1.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.48.002V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.48.002V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.12.5 3GPP TS 48.004**Base Station System – Mobile Services Switching Centre (BSS-MSC) Interface Layer 1**

This document contains the BSS-MSC interface layer 1 specifications for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.04V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.004V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.004V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.004V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.6 3GPP TS 48.006**Signalling Transport mechanism specification for the BSS-MSC Interface**

This document contains the BSS-MSC interface signalling transport specifications for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.06V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.006V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.006V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.006V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.7 3GPP TS 48.008**Base Station System – Mobile Services Switching Centre (BSS-MSC) Interface Layer 3**

This document contains the BSS-MSC interface layer 3 specifications for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.08.08V8150-2005	8.15.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.008V5120-2005	5.12.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.008V6110-2006	6.11.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.008V7130-2009	7.13.0	Approved	24/07/2009	https://www.atis.org/docstore/default.aspx

5.4.2.12.8 3GPP TS 48.020**Rate Adaption on the BSS-MSC Interface**

This document specifies the rate adaption function on the BSS-MSC interface for the alternate circuit switched component.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.20V840-2003	8.4.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.020V520-2005	5.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.020V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.020V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.9 3GPP TS 48.031**Location Services; SMLC – SMLC SMLCPP specification (BSS-MSC) Interface Layer 3 specifications**

This document contains the SMLC-SMLC protocol specification for location services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.31V811-2003	8.1.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.48.031V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.48.031V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.48.031V710-2008	7.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.12.10 3GPP TS 48.051**Base Station Controller – Base Transceiver Station (BSC-BTS) Interface General aspects**

This document describes the general aspects of the BSC-BTS interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.51V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.051V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.051V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.051V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.11 3GPP TS 48.052**Base Station Controller – Base Transceiver Station (BSC-BTS) Interface; Interface principles**

This document describes the interface principles for the BSC-BTS interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.52V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.052V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.052V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.052V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.12 3GPP TS 48.054**Base Station Controller – Base Transceiver Station (BSC-BTS) Interface; Layer 1 structure of physical circuits**

This document describes the layer 1 structure of physical circuits for the BSC-BTS interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.54V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.054V501-2005	5.0.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.054V600-2005	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.054V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.13 3GPP TS 48.056**Base Station Controller – Base Transceiver Station (BSC-BTS) Interface; Layer 2 specification**

This document provides the layer 2 specification for the BSC-BTS interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.56V801-2003	8.0.1	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	T1.3GPP.48.056V500-2003	5.0.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.056V600-2006	6.0.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.056V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.14 3GPP TS 48.058**Base Station Controller – Base Transceiver Station (BSC-BTS) Interface; Layer 3 specification**

This document provides the layer 3 specification for the BSC-BTS interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	T1.3GPP.08.58V860-2003	8.6.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx

Release 5

ATIS	T1.3GPP.48.058V560-2003	5.6.0	Approved	09/12/2003	https://www.atis.org/docstore/default.aspx
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Release 6

ATIS	ATIS.3GPP.48.058V620-2007	6.2.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
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Release 7

ATIS	ATIS.3GPP.48.058V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
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5.4.2.12.15 3GPP TS 48.071**Location Services; SMLC – BSS Interface Layer 3 specifications**

This document contains the SMLC-BSS layer 3 specification for location services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.08.71V860-2008	8.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.48.071V520-2007	5.2.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.48.071V690-2007	6.9.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.48.071V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.16 3GPP TS 49.008**Application of BSS application part (BSSAP) on E interface**

This document describes the BSSAP protocol on the E interface.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.09.08V820-2005	8.2.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.49.008V510-2005	5.1.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.49.008V610-2006	6.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.49.008V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.17 3GPP TS 49.031**Location Services LCS extension (BSSAP-LE)**

This document describes the LCS extension to the BSS application part.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 99					
ATIS	ATIS.3GPP.09.31V871-2005	8.7.1	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 5					
ATIS	ATIS.3GPP.49.031V540-2005	5.4.0	Approved	12/04/2005	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.49.031V650-2006	6.5.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.49.031V760-2008	7.6.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.18 3GPP TS 23.226**Global text telephony (GTT); Stage 2; Architecture**

This document gives the stage 2 description of the architecture of the real time Text Conversation Feature called Global Text Telephony, GTT and identifies the functional capabilities needed to support the service.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.23.226V600-2008	6.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.226V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.19 3GPP TS 23.236**Intra-domain connection of Radio Access Network (RAN) nodes to multiple Core Network (CN) nodes**

This document contains the details for the Intra Domain Connection of RAN Nodes to Multiple CN Nodes and the stage 2 procedures for the support of connecting a RNC or BSC to multiple MSC servers or SGSNs.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.23.236V630-2007	6.3.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.236V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.20 3GPP TS 23.271**Location Services (LCS); Functional stage 2 description**

This document contains a functional description of location services.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.23.271V5130-2006	5.13.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.23.271V6130-2006	6.13.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.23.271V790-2008	7.9.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.21 3GPP TS 24.030**Location Services (LCS); Supplementary service operations; Stage 3**

This document gives the stage 3 description of the Location Service (LCS) operations for the mobile station. These operations apply to both CS and PS domain.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 5					
ATIS	ATIS.3GPP.24.030V510-2006	5.1.0	Approved	06/04/2006	https://www.atis.org/docstore/default.aspx
Release 6					
ATIS	ATIS.3GPP.24.030V640-2007	6.4.0	Approved	04/10/2007	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.24.030V720-2008	7.2.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.12.22 3GPP TR 25.901**Network Assisted Cell Change (NACC) from UTRAN to GERAN; Network side aspects**

This document gives the stage 3 description of the Location Service (LCS) operations for the mobile station. These operations apply to both CS and PS domain.

SDO (2)	Document No.	Version	Status	Issued date	Location (1)
Release 6					
ATIS	ATIS.3GPP.25.901V610-2008	6.1.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx
Release 7					
ATIS	ATIS.3GPP.25.901V700-2008	7.0.0	Approved	27/10/2008	https://www.atis.org/docstore/default.aspx

5.4.2.13 Other System aspects

The IMT-2000 TDMA-SC specification also includes the following documents which are useful and related to this Recommendation.

5.4.2.13.1 3GPP TS 22.002**Circuit bearer services supported by a Public Land Mobile Network (PLMN)**

This document describes the services supported by the circuit switched bearer on the 200 kHz channel.

5.4.2.13.2 3GPP TS 22.048**Security mechanisms for the (U)SIM Application Toolkit; Stage 1**

This document provides functional description for the security mechanisms employed for the SIM or USIM Application Toolkit.

5.4.2.13.3 3GPP TS 22.053**Tandem Free Operation; Service Description; Stage 1**

This document provides a stage 1 description for vocoder tandem free operation.

5.4.2.13.4 3GPP TS 22.057**Mobile Execution Environment (MexE); Stage 1 description**

This document provides a stage 1 functional description of the mobile execution environment.

5.4.2.13.5 3GPP TS 22.066**Support of Mobile Number portability; Stage 1**

This document provides a stage 1 description of mobile number portability.

5.4.2.13.6 3GPP TS 22.067**Enhanced Multi-level Precedence and Pre-emption (eMLPP) service; Stage 1**

This document provides a stage 1 description of the enhanced multi-level precedence and pre-emption (eMLPP) function, which provides different call priorities in combination with fast set-up and pre-emption.

5.4.2.13.7 3GPP TS 22.071**Location Services Supplementary service; Stage 1**

This document provides a stage 1 description of the location services supplementary service.

5.4.2.13.8 3GPP TS 22.072**Call deflection Supplementary service; Stage 1**

This document provides a stage 1 description of the call deflection supplementary service.

5.4.2.13.9 3GPP TS 22.078**Customized Applications for Mobile network Enhanced Logic (CAMEL); Stage 1**

This document provides a stage 1 description of the CAMEL functionality.

5.4.2.13.10 3GPP TS 22.079**Support of optimal routing; Stage 1**

This document provides a stage 1 of the optimal routing function.

5.4.2.13.11 3GPP TS 22.081**Line Identification Supplementary service; Stage 1**

This document provides a stage 1 description of the calling line identification supplementary service.

5.4.2.13.12 3GPP TS 22.082**Call Forwarding Supplementary service; Stage 1**

This document provides a stage 1 description of the call forwarding supplementary service.

5.4.2.13.13 3GPP TS 22.083**Call Waiting and Call Hold Supplementary service; Stage 1**

This document provides a stage 1 description of the call waiting and call hold supplementary service.

5.4.2.13.14 3GPP TS 22.084**Multi-party Supplementary service; Stage 1**

This document provides a stage 1 description of the multi-party supplementary service.

5.4.2.13.15 3GPP TS 22.085**Closed User Group (CUG) Supplementary service; Stage 1**

This document provides a stage 1 description of the multi-party supplementary service.

5.4.2.13.16 3GPP TS 22.086**Advice of Charge (AoC) Supplementary service; Stage 1**

This document provides a stage 1 description of the advice of charge supplementary service.

5.4.2.13.17 3GPP TS 22.087**User-to-User Signalling Supplementary service; Stage 1**

This document provides a stage 1 description of the user-to-user signalling supplementary service.

5.4.2.13.18 3GPP TS 22.088**Call Barring Supplementary service; Stage 1**

This document provides a stage 1 description of the call barring supplementary service.

5.4.2.13.19 3GPP TS 22.090**Unstructured Supplementary Service Data (USSD); Stage 1**

This document provides a stage 1 description of unstructured supplementary service data.

5.4.2.13.20 3GPP TS 22.091**Explicit call transfer Supplementary Service; Stage 1**

This document provides a stage 1 description of the explicit call transfer supplementary service.

5.4.2.13.21 3GPP TS 22.093**Completion of Calls to Busy Subscriber (CCBS); Stage 1**

This document provides a stage 1 service description of the explicit call transfer supplementary service.

5.4.2.13.22 3GPP TS 22.094**Follow me supplementary Service; Stage 1**

This document provides a stage 1 description of the follow me supplementary service.

5.4.2.13.23 3GPP TS 22.096**Name Identification Supplementary Service; Stage 1**

This document provides a stage 1 description of the name identification supplementary service.

5.4.2.13.24 3GPP TS 22.097**Multiple Subscriber Profile phase 1; Stage 1**

This document provides a stage 1 service description of the phase 1 multiple subscriber profile service.

5.4.2.13.25 3GPP TS 22.226**Global Text Telephony (GTT); Stage 1**

This document provides a stage 1 service description of the Global text telephony service.

5.4.2.13.26 3GPP TS 22.228**IP Multimedia Subsystem (IMS); Stage 1**

This document provides the stage 1 service requirements of the IP Multimedia Subsystem.

5.4.2.13.27 3GPP TS 23.121**Architectural requirements for Release 99**

This document provides architectural requirements for Release 99.

5.4.2.13.28 3GPP TS 23.221**Architectural requirements**

This document provides architectural requirements for GERAN and UTRAN Release 5 and Release 6.

5.4.2.13.29 3GPP TS 23.236**Intra-domain connection of RAN nodes to multiple CN nodes**

This document describes the connection of RAN nodes to multiple CN nodes such as MSCs.

5.4.2.13.30 3GPP TS 29.278**CAMEL Application part (CAP) specification for IMS**

This document describes the CAMEL application part for IP multimedia subsystems.

5.4.2.13.31 3GPP TS 41.031**Fraud information gathering system (FIGS); Service requirements; Stage 0**

This document provides a description of the fraud information gathering system for the GSM/EDGE system.

5.4.2.13.32 3GPP TS 41.033**Lawful interception requirements for GSM/EDGE**

This document provides a description of the lawful interception requirements the GSM/EDGE system.

5.4.2.13.33 3GPP TS 42.019**Subscriber Identity Modules, Application programming interface; Stage 1**

This document provides the functional description for the SIM Application Programming Interface (API) used in the GSM/EDGE specifications.

5.4.2.13.34 3GPP TS 22.031**Fraud information gathering system (FIGS); Service description; Stage 1**

This document provides a stage 1 description of the fraud information gathering system for GERAN/UTRAN systems.

5.4.2.13.35 3GPP TS 42.033**Lawful interception; Stage 1**

This document provides a stage 1 description of the lawful interception functions for the GSM/EDGE system.

5.4.2.13.36 3GPP TS 43.030**Radio network planning aspects**

This document describes the aspects of planning a radio network.

5.4.2.13.37 3GPP TS 41.061**GPRS ciphering algorithm requirements**

This document provides the requirements for the General Packet Radio ciphering algorithms.

5.4.2.13.38 3GPP TS 42.009**Security aspects**

This document provides a description of the security aspects for the GSM/EDGE system.

5.4.2.13.39 3GPP TS 42.017**Subscriber Identity Modules, Functional characteristics**

This document defines the functional characteristics for the SIM used in the GSM/EDGE specifications.

5.4.2.13.40 3GPP TS 51.010-4**Mobile Station conformance specification, Part 4- SIM Application Toolkit conformance specifications**

This document provides a conformance specification for the SIM Application toolkit.

5.4.2.13.41 3GPP TS 51.011**Specification of SIM-ME interface**

This document describes the interface between the mobile equipment and the subscriber identity module.

5.4.2.13.42 3GPP TS 31.122**USIM conformance test specification**

This document provides a conformance specification for the USIM.

5.4.2.13.43 3GPP TS 22.048**Security mechanisms for the (U)SIM application toolkit; Stage 1**

This document provides the stage 1 description of the security mechanisms for the SIM/USIM application toolkits for GERAN/UTRAN systems.

5.4.2.13.44 3GPP TS 23.031**Fraud Information Gathering System (FIGS); Service Description; Stage 2**

This document provides the stage 2 description of the fraud information gathering system for GERAN/UTRAN systems.

5.4.2.13.45 3GPP TS 23.066**Support of GSM Mobile Number Portability (MNP); Stage 2**

This document provides the stage 2 description of the GSM mobile number portability functionality.

5.4.2.13.46 3GPP TS 23.278**Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 4; Stage 2; IM CN Interworking**

This document specifies the stage 2 description for the Customized Applications for Mobile network Enhanced Logic (CAMEL) feature which provides the mechanisms to support services for the IP Multimedia Core Network (IM CN) Subsystem.

5.4.2.13.47 3GPP TS 24.002**GSM-UMTS Public Land Mobile Network (PLMN) Access Reference Configuration**

This document describes the reference configuration for access to a PLMN. A user accesses a PLMN via a number of interfaces, including the MS-BS (in A/Gb mode and GERAN Iu mode) and UE-UTRAN (in UTRAN Iu mode) interface. The purpose of this document is to indicate the possible access arrangements that may be used in conjunction with the MS-BS (in A/Gb mode and GERAN Iu mode) and UE-UTRAN (in UTRAN Iu mode) interface.

5.4.2.13.48 3GPP TS 31.103**Characteristics of the IP Multimedia Services Identity Module (ISIM) application**

This document defines the IP Multimedia Services Identity Module (ISIM) application. This application resides on the UICC IC card. In particular, this document specifies the application independent properties of the UICC/terminal interface such as the physical characteristics and the logical structure.

5.4.2.13.49 3GPP TS 31.116**Remote APDU Structure for (Universal) Subscriber Identity Module (U)SIM Toolkit**

This document defines the remote management of files and applets on the SIM/USIM/ISIM. The present document is the result of a split of TS 23.048 Release 5 between the generic part and the bearers specific application. The generic part has been transferred to SCP. This document contains the bearers specific part.

5.4.2.13.50 3GPP TS 31.130**(U)SIM Application Programming Interface (API); (U)SIM API for Java Card**

This document defines the (U)SIM Application Programming Interface extending the "UICC API for Java Card™" which allows the development of a (U)SAT application running together with a (U)SIM application and using GSM/3G network features.

5.4.2.13.51 3GPP TS 34.131**Test Specification for C-language binding to Universal Subscriber Identity Module (U)SIM Application Programming Interface (API)**

This document describes the technical characteristics and methods of test for testing the SIM API for the C programming language 3GPP TS 31.131 implemented in the subscriber identity modules for GSM and 3G networks.

5.4.2.13.52 3GPP TS 42.068**Voice Group Call Service (VGCS); Stage 1**

This document contains the stage one description of the Voice Group Call Service (VGCS) which allows speech conversation of a predefined group of service subscribers in half duplex mode on the radio link taking into account multiple mobile service subscribers involved in the VGCS call per cell.

5.4.2.13.53 3GPP TS 42.069**Voice Broadcast Service (VBS); Stage 1**

This document contains the stage one description of the Voice Broadcast Service (VBS) which allows the distribution of speech (or other signals which can be transmitted via the speech codec), generated by a service subscriber, into a predefined geographical area to all or a group of service subscribers located in this area.

5.4.2.13.54 3GPP TS 43.068**Voice Group Call Service (VGCS); Stage 2**

This document contains the stage 2 description of the Voice Group Call Service (VGCS) which allows speech conversation of a predefined group of service subscribers in half duplex mode on the radio link taking into account multiple mobile service subscribers involved in the VGCS call per cell.

5.4.2.13.55 3GPP TS 43.069**Voice Broadcast Service (VBS); Stage 2**

This document contains the stage2 description of the Voice Broadcast Service (VBS) which allows the distribution of speech (or other signals which can be transmitted via the speech codec), generated by a service subscriber, into a predefined geographical area to all or a group of service subscribers located in this area.

5.4.2.13.56 3GPP TS 43.130**Iur-g interface; Stage 2**

This document provides an overview of the Iur-g interface. It describes the motivation, principles and functionality of this interface.

5.5 IMT-2000 FDMA/TDMA

5.5.1 Overview of the radio interface

5.5.1.1 Introduction

The IMT-2000 radio interface specifications for FDMA/TDMA technology are defined by a set of ETSI standards. This radio interface is called digital enhanced cordless telecommunications (DECT).

Figure 63 shows the layers of this radio interface.

The individual layers are defined in different parts of the common interface (CI) standard. The standard specifies a TDMA radio interface with TDD. The radio-frequency bit rates for the specified modulation schemes are 1.152 Mbit/s, 2.304 Mbit/s, 3.456 Mbit/s, 4.608 Mbit/s and 6.912 Mbit/s. The standard supports symmetric and asymmetric connections, connection oriented and connectionless data transport. Using multi-carrier-operation with e.g. 3 carriers allows bit rates up to 20 Mbit/s. The network layer contains the protocols for call control, supplementary services, connection oriented message service, connectionless message service and mobility management, including the security and confidentiality services.

FIGURE 63

Protocol layered structure

Network (NWK) Layer (3)
Data Link Control (DLC) Layer (2b)
Medium Access Control (MAC) Layer (2a)
Physical Layer (PHL) (1)

M.1457-63

In addition to the CI standard, access profile standards define minimum requirements for accessing specific networks and the interworking to these networks. For example, the generic access profile (GAP) standard defines the requirements when using the speech service and the DECT packet radio service (DPRS) standard defines the requirements for packet data transport.

A high-level description of features and how the relevant ETSI standards interrelate to the different applications can be found in the ETSI Technical Report TR 101 178: "A high-level guide to the DECT standardization".

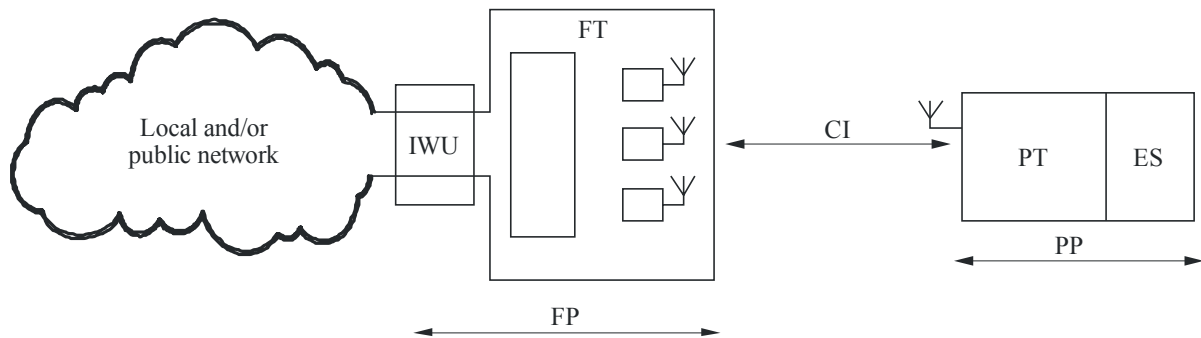
This radio interface is a general radio access technology for wireless telecommunications. It is a high capacity digital technology, for wide cell radii ranging from a few metres to several kilometres, depending on application and environment. It provides telephony quality voice services, and a broad range of data services, including ISDN and packet data. It can be effectively implemented in a range from simple residential cordless telephones up to large systems providing a wide range of telecommunications services, including fixed wireless access.

5.5.1.2 General access technology

This technology provides a comprehensive set of protocols which provide the flexibility to interwork between numerous different applications and networks. Thus a local and/or public network is not part of this specification. Figure 64 illustrates this.

The radio interface covers, in principle, only the air interface between the fixed part (FP) and portable part (PP). The interworking unit (IWU) between a network and the fixed radio termination (FT) is network specific and is not part of the CI specification, but the profile specifications define IWUs for various networks. Similarly, the end system (ES), the application(s) in a PP is also excluded. The CI specification contains general end-to-end compatibility requirements e.g. on speech transmission. The IWU and ES are also subject to general attachment requirements for the relevant public network, e.g. the PSTN/ISDN.

FIGURE 64
The CI structure



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NOTE 1 – An ES depends on the application supported in a PP. For a speech telephony application the ES may be a microphone, speaker, keyboard and display. The ES could equally well be a serial computer port, a fax machine or whatever the application requires.

For each specific network, local or global, the specific services and features of that network are made available via the air interface to the users of PPs/handsets. Except for cordless capability and mobility, this standard does not offer a specific service; it is transparent to the services provided by the connected network. Thus the CI standard is, and has to be, a tool box with protocols and messages from which a selection is made to access any specific network, and to provide means for market success for simple residential systems as well as for much more complex systems e.g. office ISDN services.

IMT-2000 FDMA/TDMA is very suitable to be used as radio access system to connect to mobile networks. Specifically the access to GSM/UMTS networks has been specified in detail, which allows the provision of GSM/UMTS services via DECT. The multipart TS 101 863 contains the UMTS interworking specification.

The detailed requirements that have governed the standardization efforts of this interface are provided by the ETR 043 – DECT Common Interface Services and Facilities Requirements Specification – where one requirement is flexibility for additions and evolutionary applications. The CI standard has a layered structure as indicated in § 5.5.2. It contains a complete set of requirements, procedures and messages. The messages also contain codes that are reserved for evolutionary applications and proprietary extensions. The authentication algorithm and the encryption algorithm are not part of the CI standard, but are obtained from ETSI through a special legal procedure. The administration of global unique identity codes for manufacturing, installation and public operation are also handled by ETSI.

5.5.1.3 Summary of the physical layer

The specification for the physical layer is given in § 5.5.2.1. The tasks of the physical layer can be grouped into five categories:

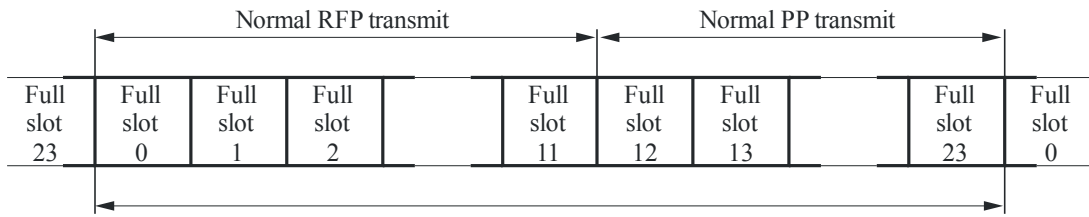
- to modulate and demodulate radio carriers with a bit stream of a defined rate to create a radio frequency channel;
- to acquire and maintain bit and slot synchronization between transmitters and receivers;
- to transmit or receive a defined number of bits at a requested time and on a particular frequency;
- to add and remove the synchronization field and the Z-field used for rear end collision detection;
- to observe the radio environment to report signal strengths.

5.5.1.3.1 The physical channels

The radio access frequency channels as well as a time structure are defined. The carrier spacing is 1.728 MHz. To access the medium in time, a regular TDMA structure with a frame length of 10 ms is used. Within this frame 24 full-slots are created, each consisting of two half-slots. A double slot has a length of two full slots, and starts concurrently with an even numbered full slot.

FIGURE 65

Frame structure using full slot format



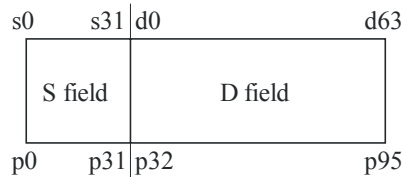
M.1457-65

Data is transmitted within the frequency, time, and space dimensions using physical packets. Physical packets shall be of one of the following four types:

- short physical packet P00 (D-field contains 64 symbols):

FIGURE 66

Packet P00

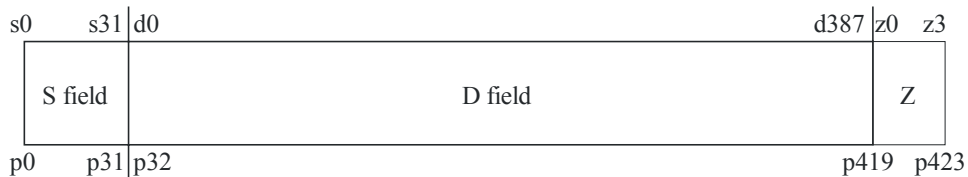


M.1457-66

- basic physical packet P32 (the D-field contains 388 symbols):

FIGURE 67

Packet P32

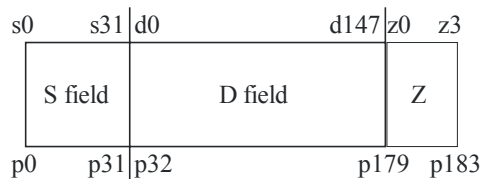


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- low capacity physical packet P08 (the D-field contains 148 symbols):

FIGURE 68

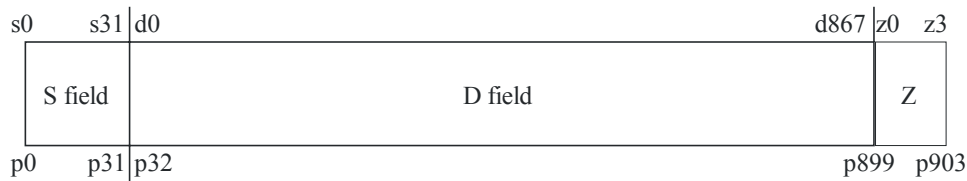
Packet P08



M.1457-68

- high capacity physical packet P80 (the D-field contains 868 symbols):

FIGURE 69

Packet P80

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Each physical packet contains a synchronization field S and a data field D. The packets P80, P32 and P08 may contain an optional collision detection field, Z.

The synchronization field S may be used by the receiver for clock and packet synchronization of the radio link. The first 16 bits are a preamble, and the last 16 bits are the packet synchronization word. A prolonged preamble field which extends the preamble bit pattern by 16 bits is optional. This prolonged preamble field may be used by a receiver for implementation of an antenna selection diversity algorithm.

5.5.1.3.2 The RF carrier modulation

The modulation method is either Gaussian frequency shift keying (GFSK), with a bandwidth-bit period product of nominally 0.5 or differential phase shift keying (DPSK) or phase amplitude modulation (QAM). Equipment is allowed to use 4-level and/or 8-level and/or 16-level and/or 64-level modulation in addition to 2-level modulation. This increases the bit rate of single radio equipment by a factor 2 or 3 or 4 or 6, which allows for 4 Mbit/s services. For example, the asymmetric double-slot service with modulation configuration 3 provides up to 5.76 Mbit/s B-field data rate per carrier. The 4-level modulation shall be $\pi/4$ -DQPSK, the 8-level modulation $\pi/8$ -D8PSK, the 16-level modulation 16-QAM and the 64-level modulation 64-QAM. It is only allowed to use 4-level and/or 8-level modulation in the B + Z or the A + B + Z fields, whereby the S + A or the S field respectively shall use the $\pi/2$ -DBPSK 2-level modulation. It is only allowed to use 16-level and/or 64-level modulation in the B + Z fields, whereby the S + A field shall use the $\pi/2$ -DBPSK 2-level modulation. The allowed combinations of modulation schemes are defined in Table 7.

TABLE 7

Allowed combinations of modulation schemes

Configuration	S-field	A-field	B + Z-field
1a	GFSK	GFSK	GFSK
1b	$\pi/2$ -DBPSK	$\pi/2$ -DBPSK	$\pi/2$ -DBPSK
2	$\pi/2$ -DBPSK	$\pi/2$ -DBPSK	$\pi/4$ -DQPSK
3	$\pi/2$ -DBPSK	$\pi/2$ -DBPSK	$\pi/8$ -D8PSK
4a	$\pi/2$ -DBPSK	$\pi/4$ -DQPSK	$\pi/4$ -DQPSK
4b	$\pi/2$ -DBPSK	$\pi/8$ -D8PSK	$\pi/8$ -D8PSK
5	$\pi/2$ -DBPSK	$\pi/2$ -DBPSK	16-QAM
6	$\pi/2$ -DBPSK	$\pi/2$ -DBPSK	64-QAM

Schemes 2, 3, 5 and 6 ensure that equipment with basic 2-level modulation, and equipment with a higher rate option, can efficiently share a common BS infrastructure. The GFSK modulation can be detected for instance in a non-coherent $\pi/2$ -DPSK receiver, and the $\pi/2$ -DPSK modulation can be detected in a GFSK receiver. Therefore all A-field information including broadcast system information, paging and call control can be received independently of whether configuration 1, 2, 3, 5 or 6 is used.

5.5.1.4 Summary of the MAC layer

The specification for the MAC layer is given in § 5.5.2.2. The MAC layer offers three groups of services to the upper layers and to the management entity:

- broadcast message control (BMC);
- connectionless message control (CMC);
- multi-bearer control (MBC).

The BMC provides a set of continuous point-to-multipoint connectionless services. These are used to carry internal logical channels, and are also offered to the higher layers. These services operate in the direction FT to PT, and are available to all PTs within range.

The CMC provides connectionless point-to-point or point-to-multipoint services to the higher layers. These services may operate in both directions between one specific FT and one or more PTs.

Each instance of MBC provides one of a set of connection oriented point-to-point services to the higher layers. An MBC service may use more than one bearer to provide a single service.

Four types of MAC bearer are defined:

- Simplex bearer: a simplex bearer is created by allocating one physical channel for transmissions in one direction.
- Duplex bearer: a duplex bearer is created by a pair of simplex bearers, operating in opposite directions on two physical channels.
- Double simplex: a double simplex bearer is created by a pair of long simplex bearers operating in the same direction on two physical channels.
- Double duplex bearer: a double duplex bearer is composed by a pair of duplex bearers referring to the same MAC connection.

A bearer can exist in one of three operational states:

- Dummy bearer: where there are normally continuous transmissions (i.e. one transmission in every frame).
- Traffic bearer: where there are continuous point-to-point transmissions. A traffic bearer is a duplex bearer or a double simplex bearer or a double duplex bearer.
- Connectionless bearer: where there are discontinuous transmissions. A connectionless bearer is either a simplex or a duplex bearer.

The MAC layer defines a logical structure for the physical channels. The user bit rate depends on the selected slot-type, modulation scheme, level of protection and number of slots. Table 8 gives the user bit rates for unprotected single slot operation.

TABLE 8

Bit rates for single slot operation

	2-level modulation (kbit/s)	4-level modulation (kbit/s)	8-level modulation (kbit/s)	16-level modulation (kbit/s)	64-level modulation (kbit/s)
Half slot	8	16	24	32	48
Full slot	32	64	96	128	192
Long slot	64	128	192	256	384
Double slot	80	160	240	320	480

5.5.1.5 Summary of the data link control (DLC) layer

The specification for the DLC layer is given in § 5.5.2.3. The DLC layer contains two independent planes of protocol, the C-plane and the U-plane. The C-plane is the control plane of the protocol stacks. The U-plane is the user plane of the protocol stacks.

5.5.1.5.1 C-plane services

The C-plane data link service is provided by two protocol entities called LAPC and Lc. These two protocol entities separate the link access protocol functions from the lower link control functions. The upper LAPC entity uses a protocol derived from the ISDN LAPD protocol. The lower Lc entity buffers and fragments complete LAPC frames (LAPC protocol data units) to/from the MAC layer.

The Lb entity provides a broadcast service in the direction FP to PP. It operates on simple fixed length frames and uses the dedicated MAC layer broadcast service.

5.5.1.5.2 U-plane services

The U-plane services are all optional, in the sense that each service corresponds to a particular requirement, and for any given application only selected services may be implemented. Each U-plane service is divided into two entities, an upper (LUx) entity and a lower (FBx) entity. The upper (LUx) entity contains all of the service dependent functions, and therefore defines the majority of the procedures. The lower (FBx) entity buffers and fragments the complete U-plane frames (LUx protocol data units) to/from the MAC layer. The following family members have been defined:

LU1:	transparent unprotected service (TRUP)
LU2:	frame relay service (FREL)
LU3:	frame switching service (FSWI)
LU4:	FEC service
LU5:	basic rate adaption service (BRAT)
LU6:	secondary rate adaption service (SRAT)
LU7:	64 kbit/s data bearer service with ARQ mechanism
LU8:	64 kbit/s data bearer service without ARQ mechanism
LU9:	unprotected rate adaption for V series equipment (RAVE) service
LU10:	enhanced data service
LU11:	64 kbit/s data bearer service when A and B fields are both modulated at 4 level
LU12 to LU15:	reserved for standard family member
LU16:	escape for non-standard family (ESC).

5.5.1.6 Summary of the network (NWK) layer

The specification for the C-plane of the NWK layer is given in § 5.5.2.4. It contains no specification for the U-plane (user plane) because the U-plane is null for all services at the NWK layer.

The NWK layer (Layer 3) protocol contains the following groups of functions:

Link control entity (LCE): The establishment, operation and release of a C-plane link between the fixed termination and every active portable termination.

Call control (CC) entity: The establishment, maintenance and release of circuit-switched calls.

Call independent supplementary services (CISS) entity: The support of call independent supplementary services.

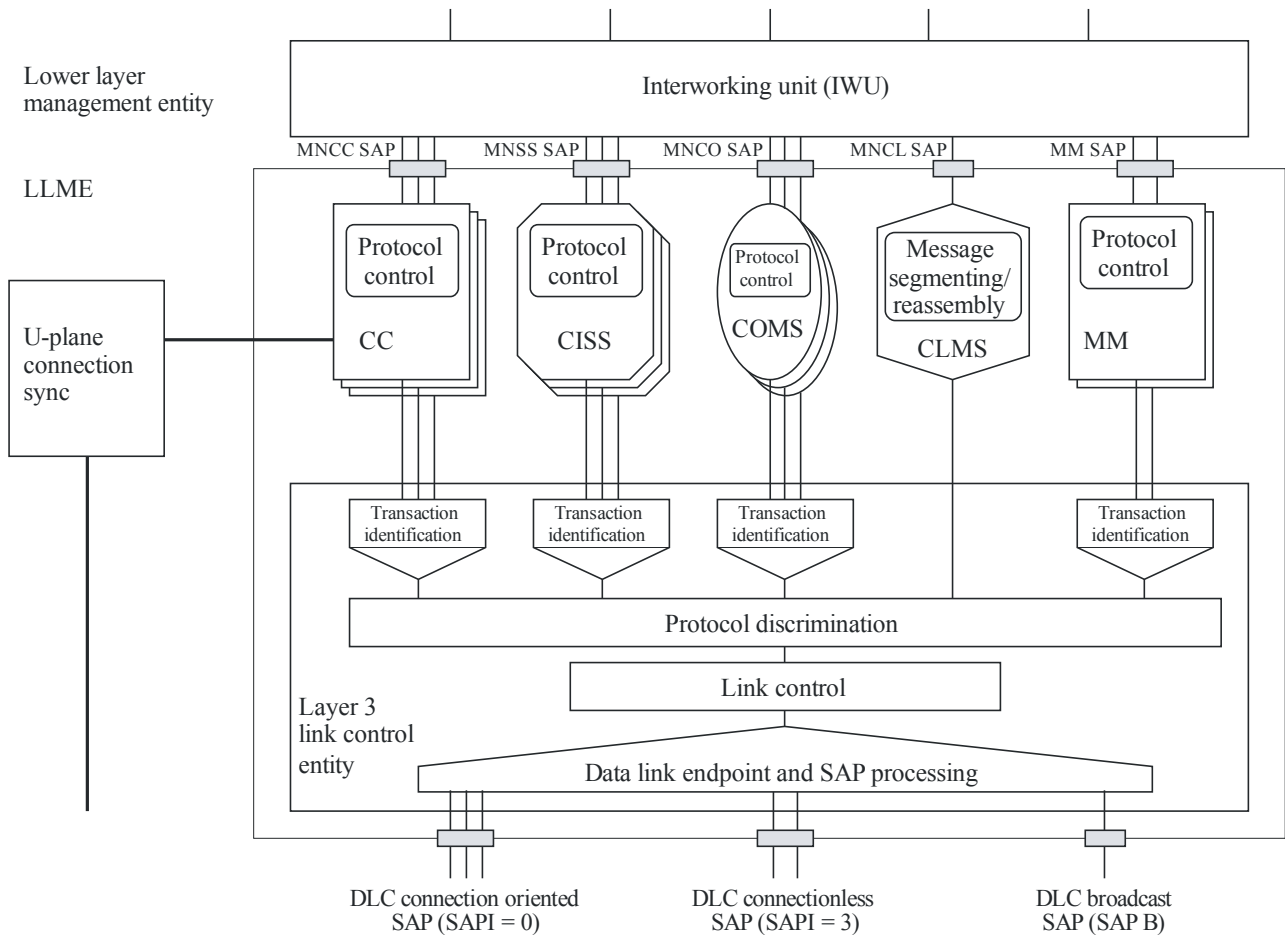
Connection oriented message service (COMS) entity: The support of connection-oriented messages.

Connectionless message service (CLMS) entity: The support of connectionless messages.

Mobility management (MM) entity: The management of identities, authentication, location updating, on-air subscription and key allocation.

In addition all of these C-plane entities interface to the lower layer management entity (LLME). This provides coordination of the operations between different NWK layer entities and also between the NWK layer and the lower layers.

FIGURE 70
Network layer



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5.5.1.7 Summary of identities and addressing

The specifications for the identities and addressing mechanisms are given in § 5.5.2.5. FP identities are used to inform PPs about the identity of a FP and the access rights to that FP and thereby reduce the number of access attempts from unauthorized portables. A FP broadcasts this information. A PP needs to be able to interpret necessary parts of this broadcast information to detect the access rights to a system or even access rights agreements between system operators, i.e. operators A and B have a bilateral agreement permitting their users to roam between their systems. These agreements can change and cannot therefore be stored in PPs without updating them frequently. Therefore the FP handles access rights information which is embedded in the identity structure. The identity structure provides solutions for residential, public and private environments. This can also be extended to combinations between these environments, e.g. private groups of users within a public network built using this standard, and e.g. public users access to private networks.

PP identities have two main purposes, first to enable a PP to select a valid FP and second to uniquely identify the PP within that FP. For these purposes there are two identities defined. These identities are the portable access rights key (PARK) and the IPUI.

Connection related identities are associated with the peer-to-peer communication. That means that every layer-to-layer connection has an identity. These identities serve the purpose of handshake, protection against co-channel interference, avoiding loss of a connection during bearer and connection handover, etc.

5.5.1.8 Summary of security features

The specifications for the security architecture, the types of cryptographic algorithms required, the way in which they are to be used, and the requirements for integrating the security features provided by the architecture are given in § 5.5.2.6. It also describes how the features can be managed and how they relate to certain fixed systems and local network configurations.

The security architecture is defined in terms of the security services which are to be supported at the CI, the mechanisms which are to be used to provide the services, and the cryptographic parameters, keys and processes which are associated with these mechanisms.

Two basic security services are specified, which are authentication and encryption. The authentication is used to verify the provided identity. There are four forms defined, which are portable authentication, fixed part authentication, mutual authentication and user authentication. Encryption is used to obtain confidentiality of the data which is transmitted over the air.

5.5.1.9 Coexistence of uncoordinated installations on a common frequency band

The mandatory instant dynamic channel selection messages and procedures provide effective coexistence of uncoordinated private and public systems on the common designated frequency band and avoid any need for traditional frequency planning. Each device has access to all channels (time/frequency combinations). When a connection is needed, the channel is selected, that at that instant and at that locality, is least interfered of all the common access channels. This avoids any need for traditional frequency planning, and greatly simplifies the installations. This procedure also provides higher and higher capacity by closer and closer BS installation, while maintaining a high radio link quality. Not needing to split the frequency resource between different services or users gives a very efficient use of the allocated spectrum. There is a large spectrum efficiency gain in sharing spectrum between applications and between operators.

Much unique knowledge and experience is available on the subject of sharing spectrum between uncoordinated installations. Information on this subject has been collected in an ETSI Technical Report, TR 101 310, which describes configurations for typical applications and relevant mixes of these, including residential, office, public and radio local loop (RLL) applications, and the traffic capacity is analysed, mainly by advanced simulations.

5.5.1.10 Access to different systems by the same PP

Each system, FP, has a broadcasted globally unique access rights identity (ARI). To each ARI are linked the available services, the related protocols and when required e.g. a cipher-key and/or authentication-key. For each service suitable protocols have been selected from the CI tool box to efficiently provide these services.

Similarly each PP (handset) has one or more portable access rights keys (PARKs). One PARK relates to one FP or a group of FPs belonging to the same operator. To each PARK are linked the corresponding FP ARIs, related services and protocols, and when required e.g. a ciphering-key and/or authentication-key.

Thus the same PP will have access to several different types of systems, if equipped with the relevant PARKs and associated protocols. Thus, it is basically not a common protocol for all systems that provide intersystem roaming, but it is that the PP is equipped with access rights and related protocols to the wanted systems. A detailed description of the flexible and powerful identity provisions are found in Part 6 of the CI standard.

5.5.1.11 Access to several applications through the same BS

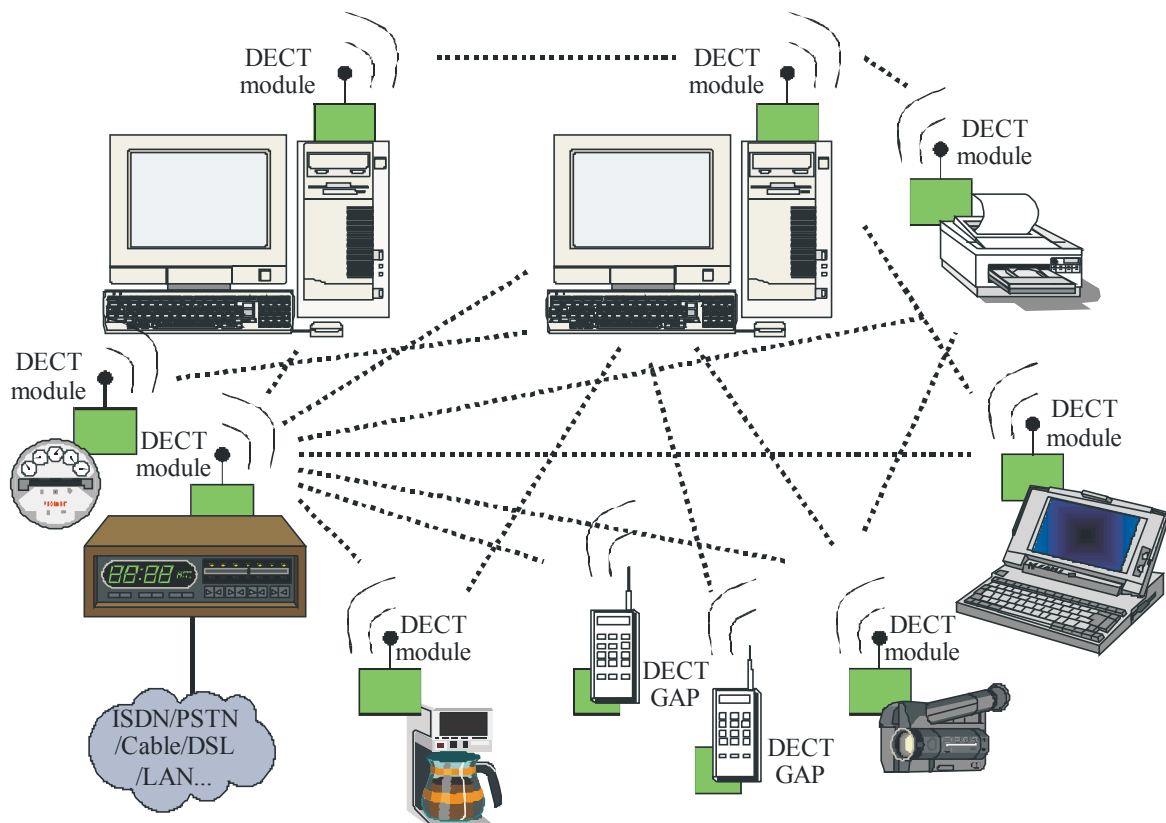
This radio interface also provides the means for sharing BS or systems between different operators or applications, e.g. hosting private user groups in a large public system, providing public access through a privately owned system, or hosting public access to several service providers in one system owned by one of the service providers.

5.5.1.12 DECT Packet Radio Service (DPRS)

This standard defines the requirements and procedures for packet data transport over the DECT air interface. It specifies the interworking to ISO/IEC 8802-3 (Ethernet), ISO/IEC 8802-5 (Token Ring), Internet Protocol (IP), Point-to-Point Protocol (PPP) and V.24. Figure 71 gives an example of a DECT wireless Ethernet LAN with Distributed Communication and additional voice capability.

FIGURE 71

DECT wireless ethernet (LAN) with distributed communication including voice capability



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5.5.1.13 DECT access to IP-networks

This technical specification defines how DECT can use mobile IP for roaming and how the DECT signalling can be interworked with the “Session Initiation Protocol” (SIP).

5.5.1.14 Open data access profile (ODAP)

This technical specification defines a common architecture and protocol to support home and industrial sensors, alarms, telematics and other machine-to-machine (M2M) messages. The profile provides a low rate (up to 28 kbit/s) protected data service utilizing a single symmetric DECT channel with an option of switching the service to a high data rate.

5.5.1.15 New Generation DECT Part 1: Wideband Speech

This technical specification is the first part of a multi-part standard for “New Generation DECT”. It defines the DECT application profile for wideband speech. In traditional telephony applications the supported bandwidth is 3.1 kHz. Increasing the bandwidth from narrow-band (300 Hz-3 400 Hz) to at least 150 Hz-7 000 Hz range (wideband) will allow to increase the speech quality with a feeling of more transparent communication and an increased intelligibility and listening comfort. One typical usage of this profile is for voice over IP.

5.5.1.16 New generation DECT Part 2: Support of transparent IP packet data

The text describes the packet-mode data service supporting Internet Protocol with efficient spectrum usage and high data rate. The aim is to guarantee a sufficient level of interoperability and to provide an easy route for development of DECT data applications, with the features of the text being a common fall-back option available in all equipment, which is compliant to this profile.

5.5.1.17 New generation DECT Part 3: Extended wideband speech services

The Part 3 “Extended wideband speech services” is defined as an extension of Part 1 “Wideband speech service”. All devices compliant to Part 3 specification shall implement at least all mandatory features defined in Part 1 “Wideband speech” and all mandatory features of the “Generic Access Profile (GAP)”.

The aim of the present text is to guarantee a sufficient level of interoperability and to provide an easy route for development of DECT wideband speech applications, with the features of the present text being a common fall-back option available in all equipment, which is compliant to this profile.

5.5.1.18 Summary of major technical parameters

TABLE 9

Technical parameter	Value	Reference to § 5.5.2
Multiple access technique	TDMA	5.5.2.2
Duplexing scheme	TDD	5.5.2.2
Frame length	10 ms	5.5.2.2
Number of time slots in a frame	12 double slots 24 full slots 48 half slots	5.5.2.2
Modulation	GFSK, $\pi/2$ -DBPSK, $\pi/4$ -DQPSK, $\pi/8$ -D8PSK, 16-QAM, 64-QAM	5.5.2.2
RF bit rate	1 152 kbit/s for 2-level modulation 2 304 kbit/s for 4-level modulation 3 456 kbit/s for 8-level modulation 4 608 kbit/s for 16-level modulation 6 912 kbit/s for 64-level modulation	5.5.2.2
Channel spacing	1 728 kHz	5.5.2.2
Transmit power	Peak power Level 1: 2.5 mW (4 dBm) Level 2: 250 mW (24 dBm)	5.5.2.2
Frequency stability	For the portable part the centre frequency accuracy shall be within ± 50 kHz at extreme conditions either relative to an absolute frequency reference or relative to the received carrier, except during the first one second after the transition from the idle-locked state to the active-locked state the centre frequency accuracy shall be within ± 100 kHz at extreme conditions relative to the received carrier. At an RFP the transmitted RF carrier frequency corresponding to RF channel C shall be in the range $F_C \pm 50$ kHz at extreme conditions. The maximum rate of change of the centre frequency at both the RFP and the PP while transmitting, shall not exceed 15 kHz per slot.	5.5.2.2

TABLE 9 (continued)

Technical parameter	Value			Reference to § 5.5.2
Adjacent channel leakage power	1 channel: 160 µW 2 channel: 1 µW 3 channel: 80 nW >3 channel: 40 nW			5.5.2.2
Transmit linearity requirements	The power level of intermodulation products that are on any of this standard's physical channel when any combination of the transmitters at a radio end point are in calls on the same slot on different frequencies shall be less than 1 µW. The power level is defined by integration over the 1 MHz centred on the nominal centre frequency of the afflicted channel and averaged over the time period.			5.5.2.2
Reference sensitivity	Better than -83 dBm -86 dBm for speech service according to Generic Access Profile (GAP). Sensitivity is measured at 1×10^{-3} raw BER.			5.5.2.2 5.5.2.11
Intermodulation sensitivity	The level of the interfering signals is -48 dBm, wanted signal is -80 dBm and 1×10^{-3} raw BER.			5.5.2.2
Spurious response and blocking	With the desired signal set at -80 dBm, the BER shall be maintained below 1×10^{-3} in the presence of any one of the signals shown in the table below; where: F_L and F_U : lower and the upper edges of the allocated frequency band; F_C : centre frequency of the allocated frequency band.			5.5.2.2
	Frequency	Interferer level for radiated measurements (dB(µV/m))	Interferer level for conducted measurements (dBm)	
	$25 \text{ MHz} < f < F_L - 100 \text{ MHz}$	120	-23	
	$F_L - 100 \text{ MHz} < f < F_L - 5 \text{ MHz}$	110	-33	
	$ f - F_C > 6 \text{ MHz}$	100	-43	
	$F_U + 5 \text{ MHz} < f < F_U + 100 \text{ MHz}$	110	-33	
	$F_U + 100 \text{ MHz} < f < 12.75 \text{ GHz}$	120	-23	
Adjacent channel selectivity	With a received signal strength of -73 dBm (i.e. 70 dB(µV/m)) on RF channel M, the BER in the D-field shall be maintained better than 1×10^{-3} when a modulated, reference interferer of the indicated strength is introduced on the RF channels shown below:			5.5.2.2
	Interferer on RF channel Y	Interferer signal strength		
		(dB(µV/m))	(dBm)	
	$Y = M$	59	-84	
	$Y = M \pm 1$	83	-60	
	$Y = M \pm 2$	104	-39	
$Y = \text{any other channel}$	110	-33		

TABLE 9 (*end*)

Technical parameter	Value	Reference to § 5.5.2
Handover	Seamless handover, mobile controlled, triggered when another BS becomes stronger.	5.5.2.3, 5.5.2.4, 5.5.2.5
Random access	Instant dynamic channel selection for every set-up using the least interfered channel measured at the mobile.	5.5.2.3
Pilot structure	Broadcast system information available on each active downlink, at least one downlink is active on every BS.	5.5.2.3
Dynamic channel allocation	Supported.	5.5.2.3

5.5.2 Detailed specification of the radio interface

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at <http://ties.itu.int/u/itu-r/IMT-2000/GCS/GCSRev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their Web site.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

5.5.2.1 EN 300 175-1

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview

This standard gives an introduction and overview of the complete Digital Enhanced Cordless Telecommunications (DECT) Common Interface (CI). This part of the DECT CI contains an abstract of the other parts of the DECT standard together with a general description of the objectives of the present document; the DECT Common Interface and the protocol architecture of DECT. The present document also provides an extensive vocabulary, in particular it contains the common definitions of all the technical terms used in different parts of the present document.

5.5.2.2 EN 300 175-2

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer (PHL)

This standard specifies the physical channel arrangements. The tasks of the PHL are to modulate and demodulate radio carriers with a bit stream of a defined rate to create a radio-frequency channel, to acquire and maintain bit and slot synchronization between transmitters and receivers, to transmit or receive a defined number of bits at a requested time and on a particular frequency, to add and remove the synchronization field and the Z-field used for rear end collision detection and to observe the radio environment to report signal strengths.

5.5.2.3 EN 300 175-3

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer

This standard specifies the Layer 2a of the DECT protocol stack. It defines three groups of MAC services: the broadcast message control service, the connectionless message control service and the multi-bearer control service. It also specifies the logical channels that are used by the above-mentioned services, and how they are multiplexed and mapped into the Service Data Units that are exchanged with the Physical Layer.

5.5.2.4 EN 300 175-4

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer

This standard specifies the Layer 2b of the DECT protocol stack. Two planes of operation are specified for this DLC (sub)layer. These planes are called the Control plane (C-plane) and the User plane (U-plane). The C-plane is mostly concerned with the DECT signalling aspects. It provides a reliable point-to-point service that uses a link access protocol to offer error protected transmission of network layer messages. The C-plane also provides a separate point-to-multipoint (broadcast) service. The U-plane is only concerned with end-to-end user information. This plane contains most of the application dependent procedures of DECT. Several alternative services (both circuit-mode and packet-mode) are defined as a family of independent entities. Each service provides one or more point-to-point U-plane data links, where the detailed characteristics of those links are determined by the particular needs of each service. The defined services cover a wide range of performance, from unprotected with low delay for speech applications to highly protected with variable delay, for local area network applications.

5.5.2.5 EN 300 175-5**Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer**

This standard specifies the Layer 3 of the DECT protocol stack. It contains the following groups of functions: Link Control Entity (LCE), Call Control (CC) entity, Call Independent Supplementary Services (CISS) entity, Connection Oriented Message Service (COMS) entity, Connectionless Message Service (CLMS) entity and the Mobility Management (MM) entity.

5.5.2.6 EN 300 175-6**Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing**

This standard specifies the identities and addressing structure of the DECT Common Interface. There are four categories of identities defined, which are Fixed Part (FP), Portable Part (PP), connection-related, and equipment-related identities.

5.5.2.7 EN 300 175-7**Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features**

This part of the DECT CI specifies the security architecture, the types of cryptographic algorithms required, the way in which they are to be used, and the requirements for integrating the security features provided by the architecture into the DECT CI. It also describes how the features can be managed and how they relate to certain DECT fixed systems and local network configurations. The security architecture is defined in terms of the security services which are to be supported at the CI, the mechanisms which are to be used to provide the services, and the cryptographic parameters, keys and processes which are associated with these mechanisms.

5.5.2.8 EN 300 175-8**Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech coding and transmission**

This part of the DECT CI specifies the speech coding and transmission requirements. In order to ensure satisfactory interworking of different portable and fixed units, it is necessary to specify the transmission performance of the analogue information over the digital link. This requires not only use of a common speech algorithm, but also standardization of frequency responses, reference speech levels (or loudness) at the air interface and various other parameters.

5.5.2.9 EN 300 176-1**Digital Enhanced Cordless Telecommunications (DECT); Approval test specification; Part 1: Radio**

This standard specifies radio tests for DECT equipment. It covers testing of radio-frequency parameters, security elements and those DECT protocols that facilitate the radio-frequency tests and efficient use of frequency spectrum. The aims of this document are to ensure efficient use of frequency spectrum and that no harm is done to other radio networks and services.

5.5.2.10 EN 300 176-2**Digital Enhanced Cordless Telecommunications (DECT); Approval test specification; Part 2: Speech**

This standard specifies tests applicable to DECT speech transmission.

5.5.2.11 EN 300 444**Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile**

The objective of the standard is to ensure inter-operability of DECT equipment capable of 3.1 kHz telephony applications. The profile consists of the minimum mandatory requirements that allow a 3.1 kHz teleservice connection to be established, maintained and released between a Fixed Termination (FT) and a Portable Termination (PT) with the appropriate access rights.

5.5.2.12 EN 301 649**Digital Enhanced Cordless Telecommunications (DECT); DECT Packet Radio Service**

The document defines the standard for packet data services for Digital Enhanced Cordless Telecommunications (DECT) systems conforming to EN 300 175 Parts 1 to 7. It is the basis of profiles which define more specific applications, aimed at the connection of terminals supporting packet data services to a fixed infrastructure, both private and public.

5.5.2.13 TS 102 265**Digital Enhanced Cordless Telecommunications (DECT); DECT access to IP-networks**

The document specifies additional requirements for Digital Enhanced Cordless Telecommunications (DECT) Internet Protocol applications including networking aspects, voice over IP, SIP interworking, mobility and quality of service properties.

5.5.2.14 TS 102 342**Digital Enhanced Cordless Telecommunications (DECT); Cordless multimedia communication system; Open Data Access Profile (ODAP)**

The document defines a common architecture and protocol to support home and industrial sensors, alarms, telematics and other Machine_to_Machine (M2M) messages. The specification aims at ensuring low cost terminals and an easy to use application interface.

5.5.2.15 TS 102 527-1**Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 1: Wideband Speech**

New Generation DECT improves audio quality by implementing wideband enhanced quality audio codecs. The document defines the wideband voice service for DECT with the aim to guarantee interoperability. All New Generation DECT wideband speech devices are backward compatible with traditional DECT voice devices.

5.5.2.16 TS 102 527-2**Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 2: Support of transparent IP packet data**

The document describes the packet-mode data service supporting Internet Protocol with efficient spectrum usage and high data rate. The aim is to guarantee a sufficient level of interoperability and to provide an easy route for development of DECT data applications, with the features of the document being a common fall-back option available in all equipment, which is compliant to this profile.

5.5.2.17 TS 102 527-3**Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 3: Extended Wideband Speech Services**

The Part 3 “Extended wideband speech services” is defined as an extension of Part 1 “Wideband speech service”. All devices compliant to Part 3 specification shall implement at least all mandatory features defined in Part 1 "Wideband speech" and all mandatory features of the “Generic Access Profile (GAP)”.

The aim of the present document is to guarantee a sufficient level of interoperability and to provide an easy route for development of DECT wideband speech applications, with the features of the present document being a common fall-back option available in all equipment, which is compliant to this profile.

5.6 IMT-2000 OFDMA TDD WMAN

5.6.1 Overview of the set of radio interface FDD/TDD components

5.6.1.1 TDD component

5.6.1.1.1 Introduction

The IEEE standard relevant for IMT-2000 OFDMA TDD WMAN, designated as IEEE Std 802.16, is developed and maintained by the IEEE 802.16 Working Group on Broadband Wireless Access. It is published by the IEEE Standards Association (IEEE-SA) of the Institute of Electrical and Electronics Engineers (IEEE).

The radio interface technology specified in IEEE Standard 802.16 is flexible, for use in a wide variety of applications, operating frequencies, and regulatory environments. IEEE 802.16 includes multiple physical layer specifications, one of which is known as WirelessMAN-OFDMA. OFDMA TDD WMAN is a special case of WirelessMAN-OFDMA specifying a particular interoperable radio interface. The component of OFDMA TDD WMAN defined here operates in TDD mode.

The OFDMA TDD WMAN radio interface comprises the two lowest network layers – the physical layer (PHY) and the data link control layer (DLC). The lower element of the DLC is the medium access control layer (MAC); the higher element in the DLC is the logical link control layer (LLC). The PHY is based on orthogonal frequency division multiple access (OFDMA) suitable for use in a 5 MHz, 10 MHz, 7 MHz, or 8.75 MHz channel allocation. The MAC is based a connection-oriented protocol designed for use in a point-to-multipoint configuration. It is designed to carry a wide range of packet-switched (typically IP-based) services while permitting fine and instantaneous control of resource allocation to allow full carrier-class Quality of Service (QoS) differentiation.

5.6.1.1.2 Radio access network architecture

The OFDMA TDD WMAN radio interface is designed to carry packet-based traffic, including IP. It is flexible enough to support a variety of higher-layer network architectures for fixed, nomadic, or fully mobile use, with handover support. It can readily support functionality suitable for generic data as well as time-critical voice and multimedia services, broadcast and multicast services, and mandated regulatory services.

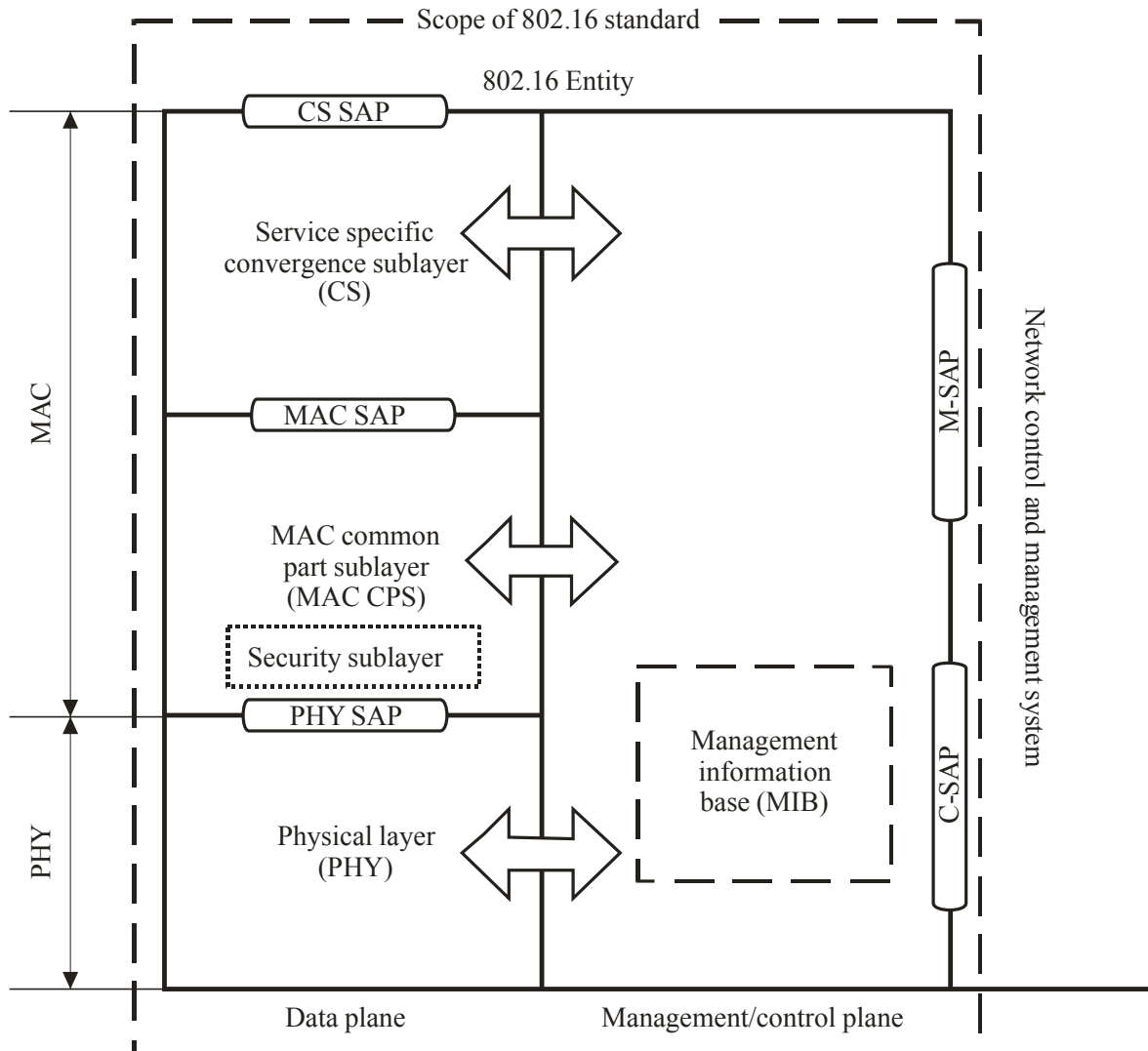
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The protocol layering is illustrated in Fig. 72. The MAC comprises three sub-layers. The service-specific convergence sublayer (CS) provides any transformation or mapping of external network data, received through the CS service access point (SAP), into MAC service data units (SDUs) received by the MAC common part sublayer (CPS) through the MAC SAP. This includes classifying external network SDUs and associating them to the proper MAC service flow identifier (SFID) and connection identifier (CID). It may also include such functions as payload header suppression (PHS). Multiple CS specifications are provided for interfacing with various protocols. The internal format of the CS payload is unique to the CS, and the MAC CPS is not required to understand the format of or parse any information from the CS payload.

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FIGURE 72

OFDMA TDD WMAN protocol layering, showing service access points (SAPs)



M.1457-72

The MAC CPS provides the core MAC functionality of system access, bandwidth allocation, connection establishment, and connection maintenance. It receives data from the various CSs, through the MAC SAP, classified to particular MAC connections.

QoS is applied to the transmission and scheduling of data over the PHY.

The MAC also contains a separate security sublayer providing authentication, secure key exchange, and encryption.

Data, PHY control, and statistics are transferred between the MAC CPS and the PHY via the PHY SAP (which is implementation specific).

The 802.16 devices can include MS or BS. As the 802.16 devices may be part of a larger network and therefore would require interfacing with entities for management and control purposes, a Network Control and Management System (NCMS) abstraction has been introduced in this standard as a “black box” containing these entities. The NCMS abstraction allows the PHY/MAC layers specified in 802.16 to be independent of the network architecture, the transport network, and the protocols used at the backend and therefore allows greater flexibility. NCMS logically exists at BS side and MS side of the radio interface, termed NCMS(BS) and NCMS(MS), respectively. Any necessary inter-BS coordination is handled through the NCMS(BS).

This specification includes a Control SAP (C-SAP) and Management SAP (M-SAP) that expose control plane and management plane functions to upper layers. The NCMS uses the C-SAP and M-SAP to interface with the 802.16 entity. In order to provide correct MAC operation, NCMS shall be present within each MS. The NCMS is a layer independent entity that may be viewed as a management entity or control entity. General system management entities can perform functions through NCMS and standard management protocols can be implemented in the NCMS.

5.6.1.1.2.1 BS and MS Functionality

The system architecture consists of two logical entities, the BS and the MS. The basic architectural assumption is of a base station (BS) communicating in point-to-multipoint fashion with a number of fixed or MSs. The BS is connected to an IP-based backhaul network. It controls and allocates the resources in spectrum and time. Transmissions on the downlink (BS to MS) are divided in both time and frequency (using the multiple sub-carriers provide by OFDMA) for assigning communications to individual MSs. Transmissions on the uplink (from MS to BS) take place according to the schedule and in the sub-channels assigned by the BS.

In brief, the BS is responsible for:

- configuring and updating basic parameters;
- performing bandwidth allocation for DL (per connection) and UL traffic (per MS) and performing centralized QoS scheduling, based on the QoS/service parameters and the active resource requests from the MS;
- communicating to all MSs, through the maps, the schedule of each frame and supporting other data and management broadcast and multicast services;
- transmitting/receiving traffic data and control information as MAC protocol data units (PDUs);
- performing connection admission control and other connection management functions;
- providing other MS support services such as ranging, clock synchronization, power control, and handover.

The MS is responsible for:

- identifying the BS, obtaining MAC parameters, and joining the network;
- establishing basic connectivity, setting up additional data and management connections, and negotiating any optional parameters as needed;
- generating resource requests for connections that require them, based on the connection profiles and traffic;
- receiving broadcast/multicast PDUs and unicast PDUs and forwarding them appropriately;
- making local scheduling decisions based on the current demand and history of resource requests/grants;
- transmitting only when instructed by the BS to do so or the MS has some information that qualifies for transmission in one of the allowed contention slots;
- unless in sleep mode, receiving all schedule and channel information broadcast by the BS and obeying all medium access rules;
- performing initial ranging, maintenance ranging, power control, and other housekeeping functions.

Figure 72 is limited to describing a system including a BS and the MSs with which it communicates. However, the radio interface also provides specifications to allow handover of an MS from one BS to another. Such handover would typically occur as a mobile device moves toward an adjacent cell. However, it might also occur due to system-wide efforts at load balancing.

5.6.1.1.3 Layer 1: Physical layer (PHY)

The radio interface is a special case of the Wireless MAN-OFDMA air interface specified in § 8.4 of IEEE Standard 802.16. It uses orthogonal frequency-division multiple access (OFDMA), which is an extension of orthogonal frequency-division multiplexing (OFDM).

5.6.1.1.3.1 OFDMA technology overview

OFDM divides the channel by frequency into orthogonal sub-carriers. Data to be transmitted is divided into parallel streams of reduced data rate (and therefore longer symbol duration) and each stream is modulated and transmitted on a separate sub-carrier. The lengthened symbol duration improves the robustness of OFDM to delay spread. Furthermore, the introduction of a cyclic prefix (CP) eliminates intersymbol interference if the CP duration is longer than the channel delay spread.

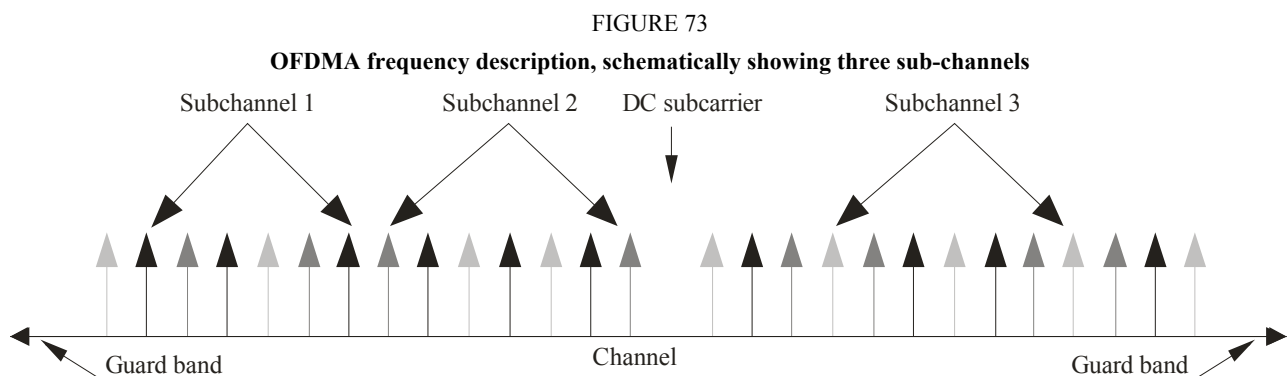
In a typical OFDM implementation, all of the transmitter's sub-carriers are, at any given time, addressed to a single receiver; multiple access is provided solely by TDMA time slotting. OFDMA, however, divides the sub-carrier set into subsets, known as sub-channels. Each sub-channel can address a different receiver at any given time. In the downlink, each sub-channel may be intended for a different receiver or group of receivers. In the uplink, multiple MSs may transmit simultaneously as long as they are assigned different sub-channels.

Sub-carriers are used for three purposes:

- Data transmission
- Pilot transmission, for various estimation purposes
- Null transmission, for guard bands and at DC.

The concept is illustrated in Fig. 73. As indicated, the sub-carriers forming one sub-channel need not be adjacent.

Sub-channelization is a multiple access technique. It provides OFDMA systems increased scheduling flexibility and a number of performance advantages, including enhanced scalability and advanced antenna array processing capabilities.



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5.6.1.1.3.2 OFDMA TDD WMAN physical layer details

The PHY utilizes OFDMA with either 512 sub-carriers in a 5 MHz channel or 1 024 sub-carriers in a 7 MHz or 10 MHz channel. In addition, 1 024 sub-carriers in a 8.75 MHz channel is also utilized for TDD. The primitive PHY parameters for TDD mode are listed in Table 10.

5.6.1.1.3.3 Framing and sub-channelization

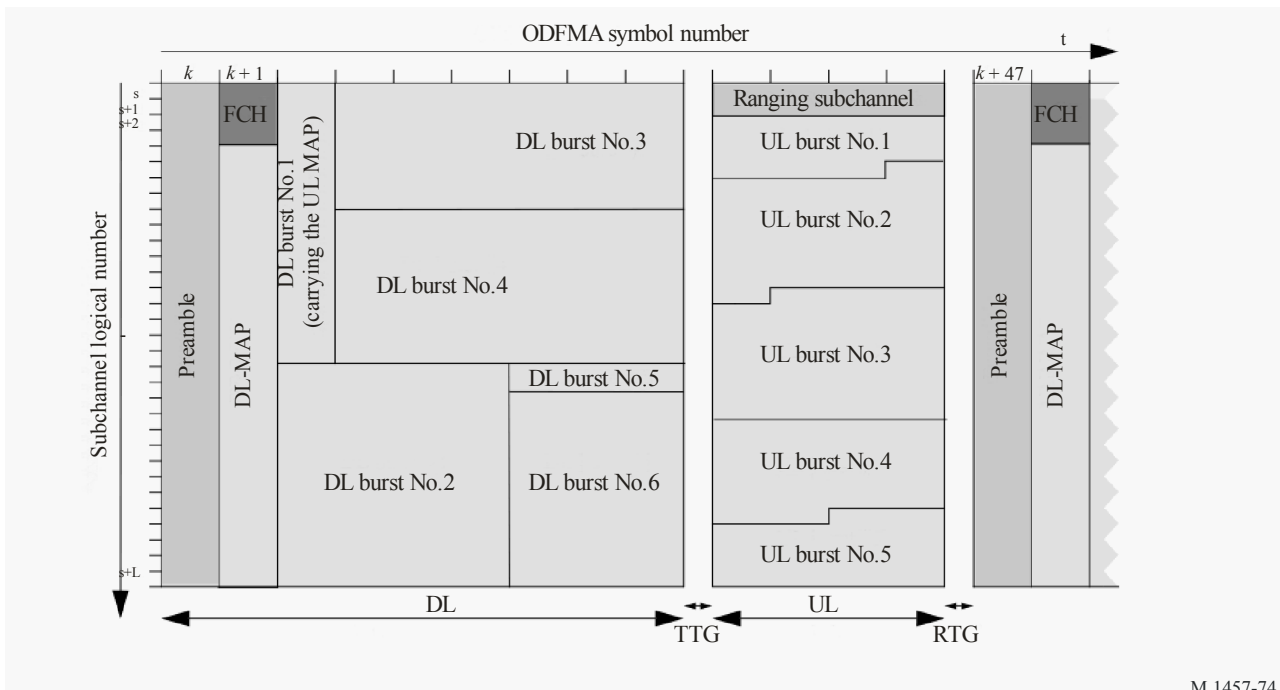
In the case of TDD, OFDMA TDD WMAN PHY utilizes a 5 ms TDD frame. The frame includes first downlink and then uplink sub-frames, divided by time gaps to allow the transceivers to switch between receive and transmit. The two gaps (TTG and RTG) are both included in the 5 ms duration. The asymmetry between the uplink and downlink sub-frame durations is configurable on a system-wide basis.

TABLE 10
OFDMA TDD WMAN primitive PHY parameters, TDD mode

FFT size (N_{FFT})	512	1 024	1 024	1 024
System channel bandwidth (BW)	5 MHz	10 MHz	8.75 MHz	7 MHz
Sampling frequency (F_s)	5.6 MHz	11.2 MHz	10 MHz	8 MHz
Sub-carrier frequency spacing ($\Delta f = F_s/N_{\text{FFT}}$)	10.9375 kHz		9.77 kHz	7.8125 kHz
Useful symbol time ($T_b = 1/\Delta f$)	~91.43 μs		~102.4 μs	128 μs
Guard (CP) time ($T_g = T_b/8$)	~11.43 μs		~12.8 μs	16 μs
OFDMA symbol duration ($T_s = T_b + T_g$)	~102.9 μs		~115.2 μs	144 μs
Frame duration	5 ms		5 ms	5 ms
OFDMA symbols per frame (including TTG and RTG)	~48		~43	~34
OFDMA symbols per frame (excluding TTG and RTG)	47		42	33

The TDD frame structure is illustrated schematically in Fig. 74.

FIGURE 74
Schematic illustration of TDD frame structure



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The frame is shown in two dimensions. The horizontal dimension represents time, which maps directly into the OFDM symbol sequence. The vertical dimension represents the list of available logical sub-channels. This maps into frequency, although only indirectly, since the sub-carriers in a given logical channel are not arranged in sequential order.

The frame begins with a preamble for synchronization. The following OFDM symbol contains the frame control header (FCH) and the downlink map (DL_MAP), transmitted simultaneously on different sub-channels. The FCH includes frame configuration data. The DL-MAP indicates the use of the DL sub-frame, in time and sub-channel allocation. The UL-MAP that follows provides similar information for

the uplink, though the allocation is relevant not to the current frame but to a subsequent one, in order to allow the MS time to prepare an appropriate transmission or in accordance with the UL-MAP.

The construction of the sub-channel from individual sub-carriers is called the permutation. OFDMA TDD WMAN provides a number of possible permutations. The optimal choice depends on the deployment scenario and instantaneous circumstances; therefore, the permutation may differ from one OFDM symbol to the next. The specification supports a sequence of permutation zones in the frame, so that different mobile stations can be served with different permutations.

5.6.1.1.3.4 Adaptive modulation and coding

OFDMA TDD WMAN supports a variety of modulation and coding alternatives. The control is adaptive and dynamic, so that the BS may select different options for communicating with different MSs and may order the MS to alter the choices in order to optimize the trade-off of robustness versus capacity.

The BS selects the modulation from among QPSK, 16-QAM, and 64-QAM. For forward error correction, Convolutional Coding and Convolutional Turbo Coding with variable code rate and repetition coding are specified. Block Turbo Code and Low Density Parity Check Code (LDPC) are supported as optional features.

Data randomization is specified in order to reduce the peak-to-average power ratio. Interleaving is specified to increase frequency diversity.

5.6.1.1.3.5 Fast feedback and hybrid ARQ

OFDMA TDD WMAN specifies an uplink fast-feedback channel to provide time-critical PHY parameter data to the BS. Parameters include signal-to-noise ratio, MIMO coefficients, and MIMO configuration parameters.

Additional UL acknowledgment channels may be allocated by the BS to support hybrid automatic repeat request (HARQ).

5.6.1.1.4 Layer 2: Medium access control layer (MAC)

The medium access control layer (MAC) functionality controls access to the medium, which in this case is the radio spectrum. The MAC is also responsible for basic functions such as data encapsulation, fragmentation, radio resource control, radio link control, error detection and retransmission, QoS, security, sleep mode, and handover.

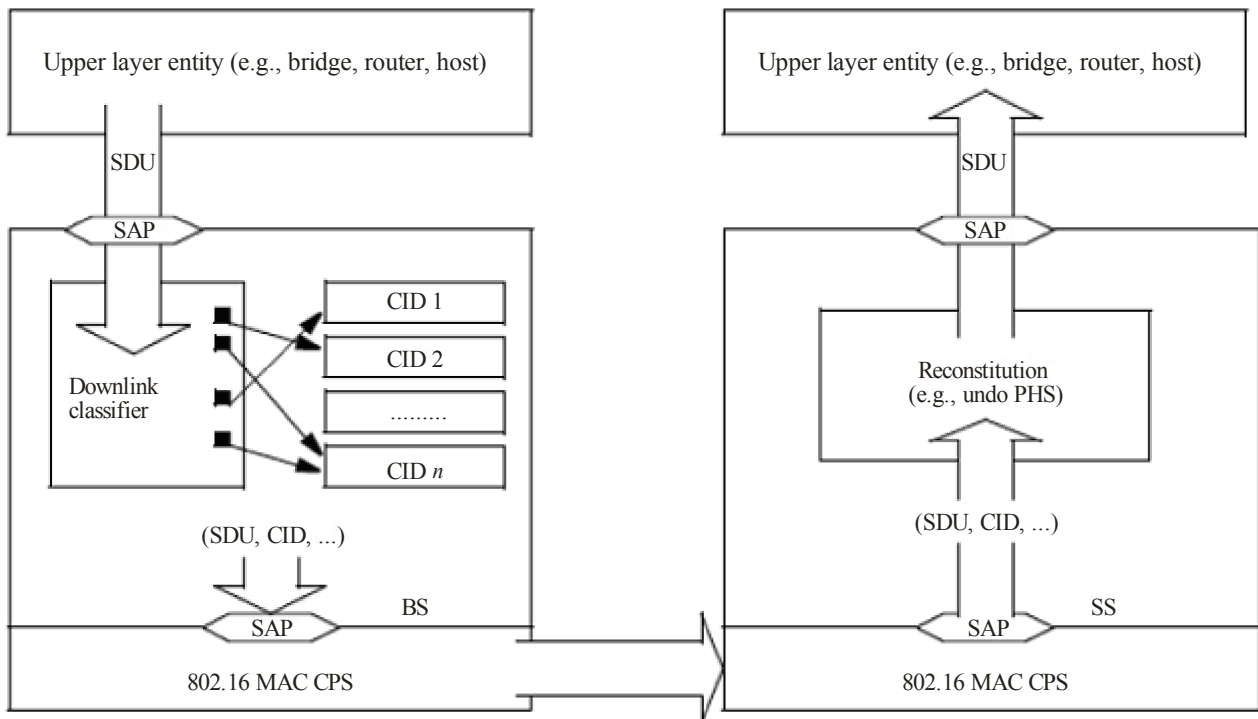
Although the radio interface is designed primarily to support a connectionless network layer, such as IP, the MAC is connection-oriented. All services, including inherently connectionless services, are mapped to a connection. The connection provides a mechanism for requesting resource allocation, associating QoS and traffic parameters, transporting and routing data, and all other actions associated with the terms of the service. A 16-bit connection identifier (CID) is assigned to designate each connection. The MAC uses the CID to identify all information exchanged between BS and MS, including management and broadcast data. The CID provides a simple and direct way to differentiate traffic. All MAC-level QoS functions, such as the classifier and QoS scheduler, use the CID to identify and differentiate traffic in order to maintain the service level and fairness among connections.

5.6.1.1.4.1 Convergence sub-layer (CS)

At the transmitter side, the Convergence sub-layer is responsible for transforming packet-based protocol data units from the higher layer protocol into MAC service data unit (SDUs), possibly using payload header suppression (PHS) to suppress some of the packet headers and reduce the burden of carrying them over the air. The CS then classifies each MAC SDU, assigning it to a particular connection, and passes it to the MAC CPS. At the receiver side, the CS is responsible for the inverse operations, including reassembly of packets into their original format with complete headers.

The CS contains a classification function that determines on which connection a particular packet shall be carried and which PHS rule applies for that packet. The operation is illustrated in Fig. 75, which shows the downlink case. Classifier parameters are configured during dynamic service signalling.

FIGURE 75
Classification and CID mapping (downlink)



M.1457-75

5.6.1.1.4.2 MAC common part sub-layer (CPS)

The MAC CPS is responsible for performing the core MAC functions. It receives MAC service data units (SDUs) from the CS and encapsulates them in its native MAC PDU format for transmission over the PHY. The MAC CPS also manages the transport connections and QoS, controlling access to the radio spectrum by the MSs.

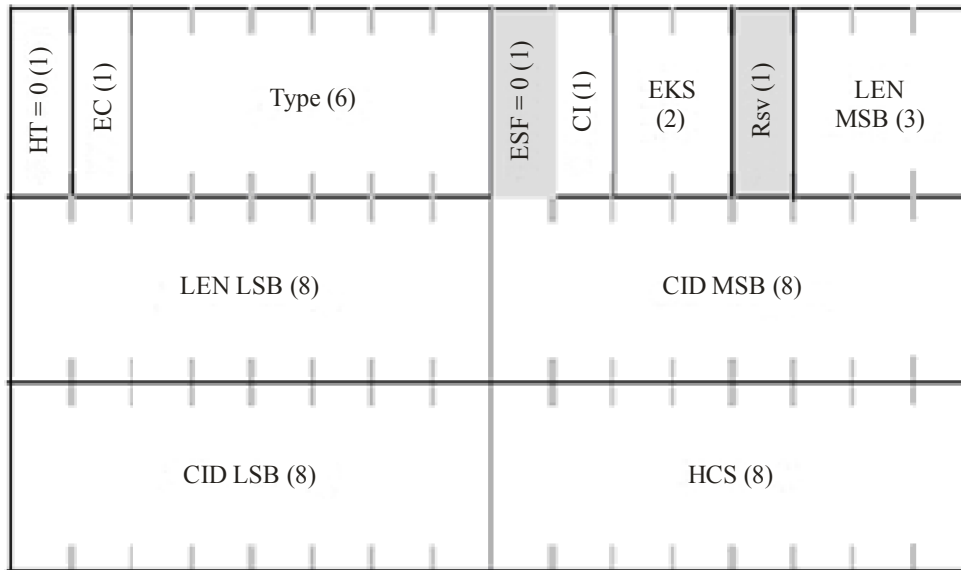
Encapsulation may be as simple as adding necessary information to the SDU. However, the MAC CPS also has the possibility of dividing a single SDU into multiple fragments before transmission, for reassembly at the receiving MAC CPS. Fragmentation allows more efficient support of higher layer protocols with variable-size SDUs, given that the underlying PHY used a fixed frame size. The MAC CPS also has the complementary option to pack multiple higher layer payloads into a single PDU. Since MAC encapsulation introduces some fixed overhead per PDU, this can improve the efficiency of carrying small SDUs.

A MAC PDU consists of a six-byte MAC header, a variable-length payload, and an optional cyclic redundancy check. Four header formats, distinguished by the HT field, are defined. The generic header is shown in Fig. 76.

MAC PDUs generally contain either MAC management messages or convergence sub-layer data. However, one header type is reserved for uplink PDUs that contain no payload, conveying their information (such as a resource request) in the content of the header itself. Additional sub-headers are also defined. For example, the MS can use the grant management sub-header to convey bandwidth management needs to the BS. The fragmentation sub-header contains information that indicates the presence and orientation in the payload of any fragments of SDUs. The packing subheader is used to indicate the packing of multiple SDUs into a single PDU. The grant management and fragmentation sub-headers may be inserted in MAC PDUs immediately following the generic header if so indicated by the Type field. The packing sub-header may be inserted before each MAC SDU if so indicated by the Type field.

FIGURE 76

Generic MAC header format



M.1457-76

5.6.1.1.4.2.1 Uplink scheduling services

The scheduling algorithm is not specified in the standard but is critical to efficient multimedia delivery when the BS supports a variety of disparate connections. The BS is presumed capable of scheduling its own downlink transmissions based on QoS information developed in the CS. Uplink scheduling is more complicated because, while resource allocation is under the control of the BS, only the MSs know in real time their immediate transmission demands.

In order to allow efficient QoS-based scheduling, a number of uplink scheduling services are defined, with a specific service assigned to each connection. The QoS categories are summarized in Table 11.

TABLE 11

OFDMA TDD WMAN Uplink scheduling services

QoS category	Typical applications	QoS specifications
UGS Unsolicited grant service	VoIP	Maximum sustained rate Maximum latency tolerance Jitter tolerance
rtPS Real-time packet service	Streaming audio or video	Minimum reserved rate Maximum sustained rate Maximum latency tolerance Traffic priority
ErtPS Extended real-time packet service	Voice with activity detection (VoIP)	Minimum reserved rate Maximum sustained rate Maximum latency tolerance Jitter tolerance Traffic priority
nrtPS Non-real-time packet service	File transfer protocol (FTP)	Minimum reserved rate Maximum sustained rate Traffic priority
BE Best-effort service	Data transfer, web browsing, etc.	Maximum sustained rate Traffic priority

Resource requests, for transmission slots, are initiated by a specific connection at the MS. However, grants are allocated not to the connection but to the supporting MS. The MS is required to manage the slots allocated to it, assigning them to the multiple connections it supports. By distributing the management and permitting local resource allocation, over-the-air negotiation is minimized and rescheduling decisions are made more quickly and effectively.

5.6.1.1.4.2.2 Radio link control

As noted in § 5.6.1.3.2, OFDMA TDD WMAN supports adaptive modulation and coding. The MAC CPS is responsible for radio link control. This involves managing the modulation and coding selection at the MS through interactive message exchange based on monitoring the ratio of carrier signal to noise and interference.

5.6.1.1.4.2.3 Energy conservation in the MS

The MAC CPS controls two energy-saving modes – Sleep Mode and Idle Mode – to conserve energy in the MS. During Sleep Mode, the MS observes pre-negotiated periods without transmission. Idle Mode is intended as a mechanism to allow the MS to become periodically available for DL broadcast messaging without registration at a specific BS as the MS traverses an air link environment populated by multiple BSs, typically over a large geographic area.

5.6.1.1.4.2.4 Handover

The MAC CPS supports optimized hard handover.

5.6.1.1.4.3 Security sub-layer

The security sub-layer, which operates between the PHY and the MAC CPS, is responsible for providing strong encryption, decryption, mutual authentication, and secure key exchange. Security is maintained as a separate sub-layer so that it may be upgraded as necessary. Also, the key functionality internal to the sub-layer is also modular, to provide easy maintenance upgrade. For example, the protocol provides a means of identifying one from a set of supported cryptographic suites, each of which specifies data encryption and authentication algorithms, and the rules for applying those algorithms to a MAC PDU payload.

The security sub-layer utilizes a security association (SA), which is a set of information shared between the transmitter and receiver. Each SA contains information on the cryptographic suite used for that SA and may also contain keys, such as the traffic encryption keys (TEKs), along with the key lifetimes and other associated state information. Prior to transmission, the MAC PDUs are mapped to an SA. The receiver uses the CID to determine the correct SA and applies the corresponding processing to the received PDU.

Device and user authentication use the IETF EAP protocol. OFDMA TDD WMAN encrypts user data using the AES-CCM cryptographic suite, with the Advanced Encryption Standard (AES) algorithm in the counter with CBC-MAC (CCM) mode, with 128-bit keys. The keys are generated using EAP authentication and managed by a Traffic Encryption Key (TEK) state machine. MAC management messages are AES encrypted and authenticated. A three-way handshake scheme is supported to optimize re-authentication during handover.

5.6.1.1.5 Smart antennas

OFDMA TDD WMAN specifies the use of smart antenna technologies, including antenna beamforming, space-time coding, and spatial multiplexing, which increase the cell size, data throughput, and spectral efficiency. These techniques reduce the sensitivity of the system to fading and multipath transmission effects.

5.6.1.1.6 Summary of major technical parameters

TABLE 12

OFDMA TDD WMAN parameters and capabilities, TDD mode

Parameter/Capability	Value				IEEE 802.16 Subclause
Duplex method	TDD				§ 8.4.4
Physical layer mode	OFDMA				§ 8.4
System channel bandwidth	5 MHz	10 MHz	8.75 MHz	7 MHz	§ 8.4.1
FFT size	512	1 024	1 024	1024	
Frame duration	5 ms		5 ms	5 ms	§ 8.4.5.2
Transmit transition gap (TTG)	105.714 μ s		87.2 μ s	188 μ s	§ 8.4.5.2
Receive transition gap (RTG)	60 μ s		74.4 μ s	60 μ s	§ 8.4.5.2
Modulation, downlink	QPSK, 16-QAM, 64-QAM				§ 8.4.9.4.2
Modulation, uplink	QPSK, 16-QAM				§ 8.4.9.4.2
Forward error correction coding	Convolutional Coding and Convolutional Turbo Coding				§§ 8.4.9.2.1; 8.4.9.2.3 excluding 8.4.9.2.3.5
Encryption	AES-CCM, AES Key Wrap, 128-bit keys				§ 11.9.14
Authentication	EAP				§ 11.8.4.2
Privacy key management	PKMv2				§ 7.2.2
Management message integrity protection	CMAC				§ 7.5.4.4

5.6.1.2 FDD component

5.6.1.2.1 Introduction

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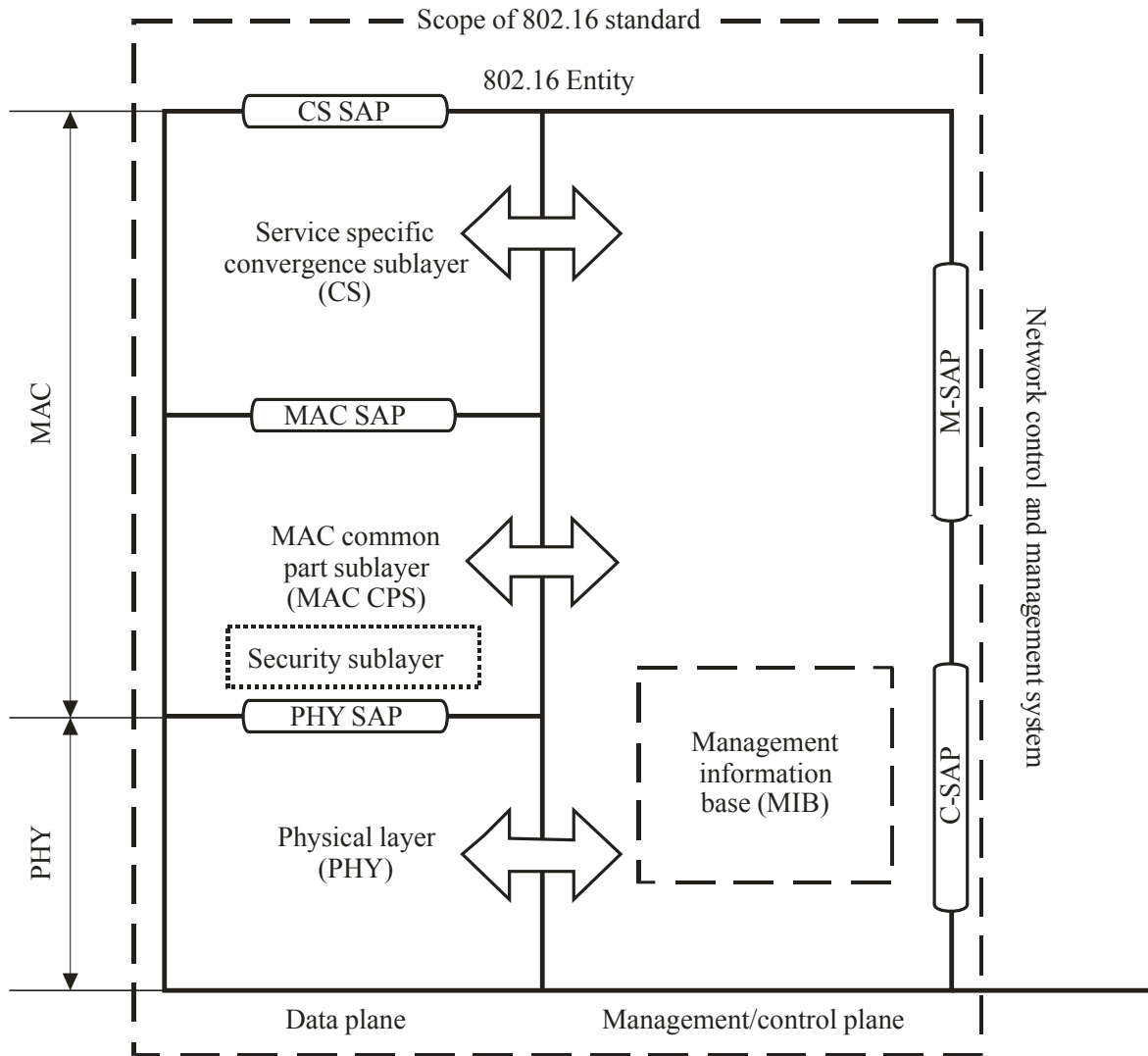
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FIGURE 77

OFDMA TDD WMAN protocol layering, showing service access points (SAPs)



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5.6.1.2.3.1 OFDMA technology overview

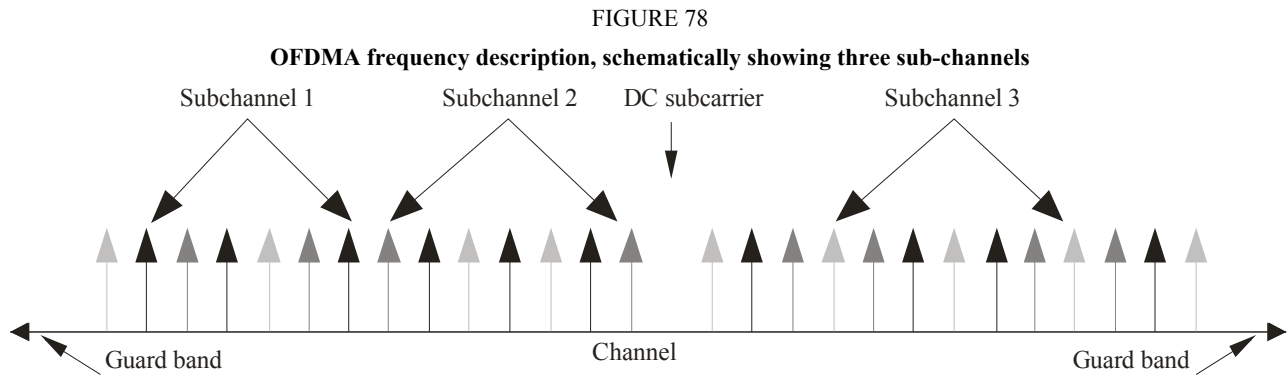
OFDM divides the channel by frequency into orthogonal sub-carriers. Data to be transmitted is divided into parallel streams of reduced data rate (and therefore longer symbol duration) and each stream is modulated and transmitted on a separate sub-carrier. The lengthened symbol duration improves the robustness of OFDM to delay spread. Furthermore, the introduction of a cyclic prefix (CP) eliminates intersymbol interference if the CP duration is longer than the channel delay spread.

In a typical OFDM implementation, all of the transmitter's sub-carriers are, at any given time, addressed to a single receiver; multiple access is provided solely by TDMA time slotting. OFDMA, however, divides the sub-carrier set into subsets, known as sub-channels. Each sub-channel can address a different receiver at any given time. In the downlink, each sub-channel may be intended for a different receiver or group of receivers. In the uplink, multiple MSs may transmit simultaneously as long as they are assigned different sub-channels.

Sub-carriers are used for three purposes:

- Data transmission
- Pilot transmission, for various estimation purposes
- Null transmission, for guard bands and at DC.

The concept is illustrated in Fig. 78. As indicated, the sub-carriers forming one sub-channel need not be adjacent.



M.1457-78

Sub-channelization is a multiple access technique. It provides OFDMA systems increased scheduling flexibility and a number of performance advantages, including enhanced scalability and advanced antenna array processing capabilities.

5.6.1.2.3.2 OFDMA TDD WMAN physical layer details

The PHY utilizes OFDMA with either 512 sub-carriers in a 5 MHz channel or 1 024 sub-carriers in a 7 MHz or 10 MHz channel. The primitive PHY parameters for FDD mode are listed in Table 13.

TABLE 13

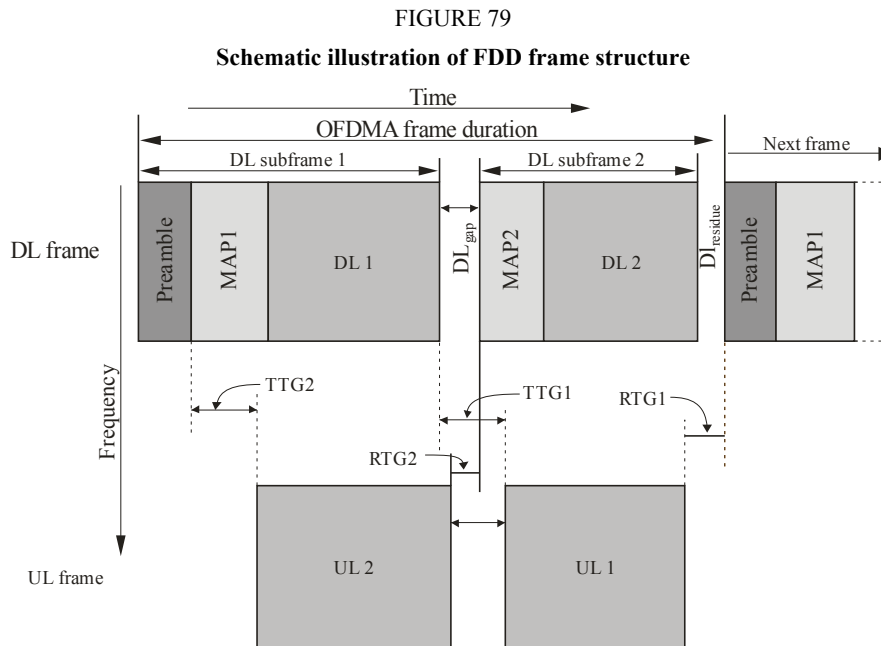
OFDMA TDD WMAN primitive PHY parameters, FDD mode

FFT size (N_{FFT})	512	1 024	1 024
System channel bandwidth (BW)	5 MHz	10 MHz	7 MHz
Sampling frequency (F_s)	5.6 MHz	11.2 MHz	8 MHz
Sub-carrier frequency spacing ($\Delta f = F_s/N_{\text{FFT}}$)	10.9375 kHz		7.8125 kHz
Useful symbol time ($T_b = 1/\Delta f$)	~91.43 μs		128 μs
Guard (CP) time ($T_g = T_b/8$)	~11.43 μs		16 μs
OFDMA symbol duration ($T_s = T_b + T_g$)	~102.9 μs		144 μs
Frame duration	5 ms		5 ms
OFDMA symbols per frame	~48		~34

5.6.1.2.3.3 Framing and sub-channelization

The FDD frame structure is illustrated in Fig. 79. This frame structure can concurrently support both Full Duplex FDD (F-FDD) and Half Duplex FDD (H-FDD) Mobile Stations. The frame is partitioned using MAP1 and MAP2 control structures for H-FDD MSs.

For systems that serve only F-FDD MSs, the frame structure is configured by allocating the whole down link and uplink frames to the F-FDD MSs without partitioning of frames.



M.1457-79

5.6.1.2.3.4 Adaptive modulation and coding

OFDMA TDD WMAN supports a variety of modulation and coding alternatives. The control is adaptive and dynamic, so that the BS may select different options for communicating with different MSs and may order the MS to alter the choices in order to optimize the trade-off of robustness versus capacity.

The BS selects the modulation from among QPSK, 16-QAM, and 64-QAM. For forward error correction, Convolutional Coding and Convolutional Turbo Coding with variable code rate and repetition coding are specified. Block Turbo Code and Low Density Parity Check Code (LDPC) are supported as optional features.

Data randomization is specified in order to reduce the peak-to-average power ratio. Interleaving is specified to increase frequency diversity.

5.6.1.2.3.5 Fast feedback and hybrid ARQ

OFDMA TDD WMAN specifies an uplink fast-feedback channel to provide time-critical PHY parameter data to the BS. Parameters include signal-to-noise ratio, MIMO coefficients, and MIMO configuration parameters.

Additional UL acknowledgment channels may be allocated by the BS to support hybrid automatic repeat request (HARQ).

5.6.1.2.4 Layer 2: Medium access control layer

The medium access control layer (MAC) functionality controls access to the medium, which in this case is the radio spectrum. The MAC is also responsible for basic functions such as data encapsulation, fragmentation, radio resource control, radio link control, error detection and retransmission, QoS, security, sleep mode, and handover.

Although the radio interface is designed primarily to support a connectionless network layer, such as IP, the MAC is connection-oriented. All services, including inherently connectionless services, are mapped to a connection. The connection provides a mechanism for requesting resource allocation, associating QoS and traffic parameters, transporting and routing data, and all other actions associated with the terms of the service. A 16-bit connection identifier (CID) is assigned to designate each connection. The MAC uses the CID to identify all information exchanged between BS and MS, including management and broadcast data. The CID provides a simple and direct way to differentiate traffic. All MAC-level QoS functions, such as the

classifier and QoS scheduler, use the CID to identify and differentiate traffic in order to maintain the service level and fairness among connections.

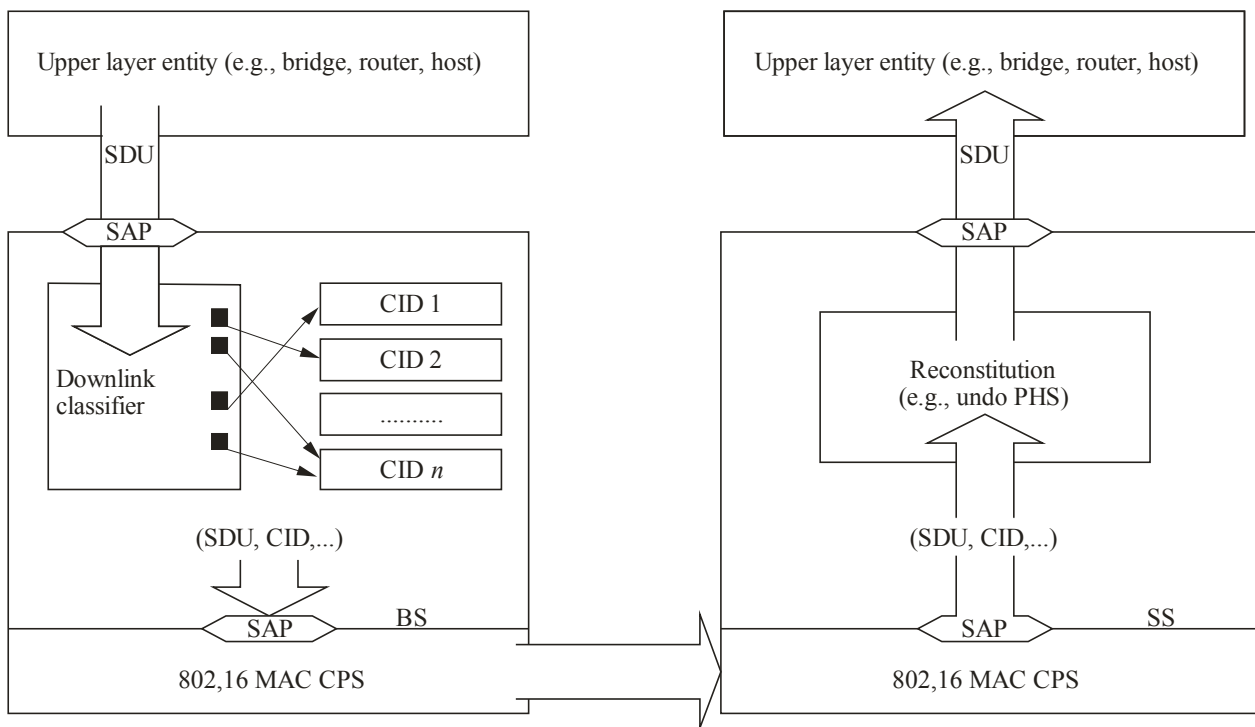
5.6.1.2.4.1 Convergence sub-layer

At the transmitter side, the Convergence sub-layer (CS) is responsible for transforming packet-based protocol data units from the higher layer protocol into MAC service data unit (SDUs), possibly using payload header suppression (PHS) to suppress some of the packet headers and reduce the burden of carrying them over the air. The CS then classifies each MAC SDU, assigning it to a particular connection, and passes it to the MAC CPS. At the receiver side, the CS is responsible for the inverse operations, including reassembly of packets into their original format with complete headers.

The CS contains a classification function that determines on which connection a particular packet shall be carried and which PHS rule applies for that packet. The operation is illustrated in Fig. 80, which shows the downlink case. Classifier parameters are configured during dynamic service signalling.

FIGURE 80

Classification and CID mapping (downlink)



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5.6.1.2.4.2 MAC common part sub-layer

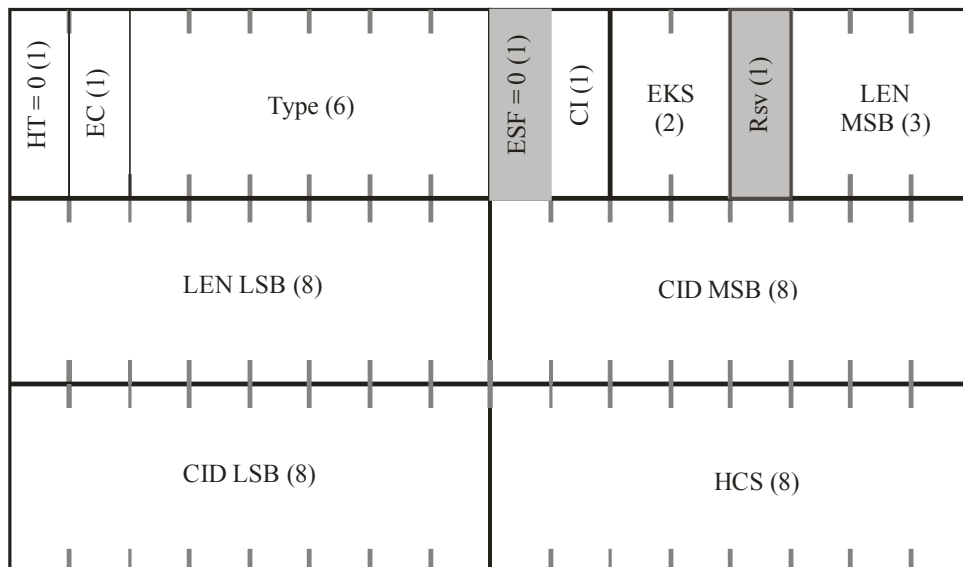
The MAC common part sub-layer (CPS) is responsible for performing the core MAC functions. It receives MAC service data units (SDUs) from the CS and encapsulates them in its native MAC PDU format for transmission over the PHY. The MAC CPS also manages the transport connections and QoS, controlling access to the radio spectrum by the MSs.

Encapsulation may be as simple as adding necessary information to the SDU. However, the MAC CPS also has the possibility of dividing a single SDU into multiple fragments before transmission, for reassembly at the receiving MAC CPS. Fragmentation allows more efficient support of higher layer protocols with variable-size SDUs, given that the underlying PHY used a fixed frame size. The MAC CPS also has the complementary option to pack multiple higher layer payloads into a single PDU. Since MAC encapsulation introduces some fixed overhead per PDU, this can improve the efficiency of carrying small SDUs.

A MAC PDU consists of a six-byte MAC header, a variable-length payload, and an optional cyclic redundancy check. Four header formats, distinguished by the HT field, are defined. The generic header is shown in Fig. 81.

MAC PDUs generally contain either MAC management messages or convergence sub-layer data. However, one header type is reserved for uplink PDUs that contain no payload, conveying their information (such as a resource request) in the content of the header itself. Additional sub-headers are also defined. For example, the MS can use the grant management sub-header to convey bandwidth management needs to the BS. The fragmentation sub-header contains information that indicates the presence and orientation in the payload of any fragments of SDUs. The packing subheader is used to indicate the packing of multiple SDUs into a single PDU. The grant management and fragmentation sub-headers may be inserted in MAC PDUs immediately following the generic header if so indicated by the Type field. The packing sub-header may be inserted before each MAC SDU if so indicated by the Type field.

FIGURE 81
Generic MAC header format



M.1457-81

5.6.1.2.4.2.1 Uplink scheduling services

The scheduling algorithm is not specified in the standard but is critical to efficient multimedia delivery when the BS supports a variety of disparate connections. The BS is presumed capable of scheduling its own downlink transmissions based on QoS information developed in the CS. Uplink scheduling is more complicated because, while resource allocation is under the control of the BS, only the MSs know in real time their immediate transmission demands.

In order to allow efficient QoS-based scheduling, a number of uplink scheduling services are defined, with a specific service assigned to each connection. The QoS categories are summarized in Table 14.

Resource requests, for transmission slots, are initiated by a specific connection at the MS. However, grants are allocated not to the connection but to the supporting MS. The MS is required to manage the slots allocated to it, assigning them to the multiple connections it supports. By distributing the management and permitting local resource allocation, over-the-air negotiation is minimized and rescheduling decisions are made more quickly and effectively.

5.6.1.2.4.2.2 Radio link control

As noted in § 5.6.1.3.2, OFDMA TDD WMAN supports adaptive modulation and coding. The MAC CPS is responsible for radio link control. This involves managing the modulation and coding selection at the MS through interactive message exchange based on monitoring the ratio of carrier signal to noise and interference.

TABLE 14
OFDMA TDD WMAN Uplink scheduling services

QoS category	Typical applications	QoS specifications
UGS Unsolicited grant service	VoIP	Maximum sustained rate Maximum latency tolerance Jitter tolerance
rtPS Real-time packet service	Streaming audio or video	Minimum reserved rate Maximum sustained rate Maximum latency tolerance Traffic priority
ErtPS Extended real-time packet service	Voice with activity detection (VoIP)	Minimum reserved rate Maximum sustained rate Maximum latency tolerance Jitter tolerance Traffic priority
nrtPS Non-real-time packet service	File transfer protocol (FTP)	Minimum reserved rate Maximum sustained rate Traffic priority
BE Best-effort service	Data transfer, web browsing, etc.	Maximum sustained rate Traffic priority

5.6.1.2.4.2.3 Energy conservation in the MS

The MAC CPS controls two energy-saving modes – Sleep Mode and Idle Mode – to conserve energy in the MS. During Sleep Mode, the MS observes pre-negotiated periods without transmission. Idle Mode is intended as a mechanism to allow the MS to become periodically available for DL broadcast messaging without registration at a specific BS as the MS traverses an air link environment populated by multiple BSs, typically over a large geographic area.

5.6.1.2.4.2.4 Handover

The MAC CPS supports optimized hard handover.

5.6.1.2.4.3 Security sub-layer

The security sub-layer, which operates between the PHY and the MAC CPS, is responsible for providing strong encryption, decryption, mutual authentication, and secure key exchange. Security is maintained as a separate sub-layer so that it may be upgraded as necessary. Also, the key functionality internal to the sub-layer is also modular, to provide easy maintenance upgrade. For example, the protocol provides a means of identifying one from a set of supported cryptographic suites, each of which specifies data encryption and authentication algorithms, and the rules for applying those algorithms to a MAC PDU payload.

The security sub-layer utilizes a security association (SA), which is a set of information shared between the transmitter and receiver. Each SA contains information on the cryptographic suite used for that SA and may also contain keys, such as the traffic encryption keys (TEKs), along with the key lifetimes and other associated state information. Prior to transmission, the MAC PDUs are mapped to an SA. The receiver uses the CID to determine the correct SA and applies the corresponding processing to the received PDU.

Device and user authentication use the IETF EAP protocol. OFDMA TDD WMAN encrypts user data using the AES-CCM cryptographic suite, with the Advanced Encryption Standard (AES) algorithm in the counter with CBC-MAC (CCM) mode, with 128-bit keys. The keys are generated using EAP authentication and managed by a Traffic Encryption Key (TEK) state machine. MAC management messages are AES encrypted and authenticated. A three-way handshake scheme is supported to optimize re-authentication during handover.

5.6.1.2.5 Smart antennas

OFDMA TDD WMAN specifies the use of smart antenna technologies, including antenna beamforming, space-time coding, and spatial multiplexing, which increase the cell size, data throughput, and spectral efficiency. These techniques reduce the sensitivity of the system to fading and multipath transmission effects.

5.6.1.2.6 Summary of major technical parameters

TABLE 15

OFDMA TDD WMAN parameters and capabilities, FDD mode

Parameter/Capability	Value			IEEE 802.16 Subclause
Duplex method	FDD			§ 8.4.4
Physical layer mode	OFDMA			§ 8.4
System channel bandwidth (uplink/downlink)	5 MHz	10 MHz	7 MHz	§ 8.4.1
FFT size	512	1 024	1 024	
Frame duration	5 ms			§ 8.4.5.2
Modulation, downlink	QPSK, 16-QAM, 64-QAM			§ 8.4.9.4.2
Modulation, uplink	QPSK, 16-QAM			§ 8.4.9.4.2
Forward error correction coding	Convolutional coding and convolutional turbo coding			§§ 8.4.9.2.1; 8.4.9.2.3 excluding 8.4.9.2.3.5
Encryption	AES-CCM, AES Key Wrap, 128-bit keys			§ 11.9.14
Authentication	EAP			§ 11.8.4.2
Privacy key management	PKMv2			§ 7.2.2
Management message integrity protection	CMAC			§ 7.5.4.4

5.6.2 Detailed specification of the set of radio interface FDD/TDD components

5.6.2.1 TDD component

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at <http://ties.itu.int/u/itu-r/ede/rsg5/IMT-2000/GCS/GCSrev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their website.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

The entries in the tables in the elements of § 5.6.2.1.x.2 that contain “Y” or interoperable options (IO-BF or IO-MIMO) are part of the detailed specifications for OFDMA TDD WMAN. The “N” entries in the Tables in the elements of § 5.6.2.1.x.2 are for information only and are not included in the OFDMA TDD WMAN specification. The specifications for OFDMA TDD WMAN are provided in the elements of § 5.6.2.1.x.1 that are specifically included in the corresponding elements of § 5.6.2.1.x.2. Anything in § 5.6.2.1.x.1 that is not mentioned in § 5.6.2.1.x.2 is excluded.

5.6.2.1.1 Release 1

5.6.2.1.1.1 IEEE Std 802.16: Standard for local and metropolitan area networks – Air interface for broadband wireless access systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

5.6.2.1.1.1.1 IEEE Std 802.16-2004

IEEE Standard for local and metropolitan area networks – Part 16: Air interface for fixed broadband wireless access systems

This revised standard specifies the air interface, including the medium access control layer and multiple physical layer specifications, of fixed BWA systems supporting multiple services. It consolidates IEEE Std 802.16™, IEEE Std 802.16a™, and IEEE Std 802.16c™, retaining all modes and major features without adding modes. Content is added or revised to improve performance, ease deployment, or replace incorrect, ambiguous, or incomplete material, including system profiles.”

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE Std 802.16-2004	Published; superseded by IEEE Std 802.16-2009	2004-10-01	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.1.1.2 IEEE Std 802.16e-2005 and Cor1

IEEE Standard for local and metropolitan area networks – Part 16: Air interface for fixed and mobile broadband wireless access systems – Amendment 2: Physical and medium access control layers for combined fixed and mobile operation in licensed bands

This document provides enhancements to IEEE Std 802.16-2004 to support subscriber stations moving at vehicular speeds and thereby specifies a system for combined fixed and mobile broadband wireless access. Functions to support higher layer handover between base stations or sectors are specified. Operation is limited to licensed bands suitable for mobility below 6 GHz. Fixed IEEE 802.16 subscriber capabilities are not compromised. In addition to mobility enhancements, this document contains substantive corrections to IEEE 802.16-2004 regarding fixed operation.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE 802.16e-2005 and Cor1	Published; superseded by IEEE Std 802.16-2009	2006-02-28	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.1.1.3 IEEE Std 802.16f-2005

IEEE Standard for local and metropolitan area networks – Part 16: Air interface for fixed broadband wireless access systems – Amendment 1: Management information base)

This document provides enhancements to IEEE Std 802.16-2004 to define a management information base (MIB) for the MAC and PHY and associated management procedures.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE 802.16f-2005	Published; superseded by IEEE Std 802.16-2009	2005-12-01	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.1.2 WiMAX Forum® Mobile System Profile

The complete WiMAX Forum® Mobile System Profile, Release 1 is included in the following volume:

5.6.2.1.1.2.1 WiMAX Forum® Mobile System Profile Release 1 – IMT-2000 Edition

This provides the complete WiMAX Forum® Mobile System Profile, Release 1.

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-007-R010v02	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-007-R010v02_MSP-IMT-2000.pdf

5.6.2.1.2 Release 1.5

5.6.2.1.2.1 IEEE Std 802.16: Standard for local and metropolitan area networks – Air interface for broadband wireless access systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

5.6.2.1.2.1.1 IEEE P802.16Rev2

(Draft) Standard for local and metropolitan area networks – Part 16: Air interface for broadband wireless access systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE Std 802.16-2009	Published	2009-05-29	http://standards.ieee.org/getieee802/802.16.html

5.6.2.1.2.2 WiMAX Forum® Mobile System Profile

The complete WiMAX Forum® Mobile System Profile, Release 1.5 is included in the following volumes.

5.6.2.1.2.2.1 WiMAX Forum® Mobile System Profile Specification: Release 1.5 - Common part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features common to both the TDD and FDD operational modes. It has the following table of contents:

1 Scope

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

2 References

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

3 Definitions

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

4 PHY profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

5 MAC profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

6 Security

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

7 Radio profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

8 Power class profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

5.6.2.1.2.2.2 WiMAX Forum® Mobile System Profile specification: Release 1.5 – TDD specific part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features specific to the TDD operational mode. The content refers to the physical layer.

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-002-R015v05	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-002-R015v01_MSP-TDD.pdf

5.6.2.1.2.2.3 WiMAX Forum® Mobile Radio specification

This specification describes the radio features of the WiMAX Forum® Mobile System Profile, Release 1.5.

SDO	Version	Status	Issued date	Location
WiMAX Forum	0.3.1	As provided in the GCS	2009-02-02	http://wimaxforum.org/imt-2000/7/MRSv031.zip

5.6.2 FDD component

The standards contained in this section are derived from the global core specifications for IMT-2000 contained at <http://ties.itu.int/u/itu-red/ede/rsg5/IMT-2000/GCS/GCSrev9/>.

The following notes apply to the sections below, where indicated:

- 1) The relevant SDOs should make their reference material available from their website.
- 2) This information was supplied by the recognized external organizations and relates to their own deliverables of the transposed global core specification.

The entries in the tables in the elements of § 5.6.2. x.2 that contain “Y” or interoperable options (IO-BF or IO-MIMO) are part of the detailed specifications for OFDMA TDD WMAN. The “N” entries in the tables in the elements of § 5.6.2. x.2 are for information only and are not included in the OFDMA TDD WMAN specification. The specifications for OFDMA TDD WMAN are provided in the elements of § 5.6.2. x.1 that are specifically included in the corresponding elements of § 5.6.2. x.2. Anything in § 5.6.2. x.1 that is not mentioned in § 5.6.2. x.2 is excluded.

5.6.2.1 Release 1

5.6.2.2 Release 1.5

5.6.2.2.1 IEEE Std 802.16: Standard for local and metropolitan area networks – Air interface for broadband wireless access systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

5.6.2.2.1.1 IEEE P802.16Rev2

(Draft) Standard for local and metropolitan area networks – Part 16: Air interface for broadband wireless access systems

This standard specifies the air interface, including the medium access control layer (MAC) and physical layer (PHY), of combined fixed and mobile point-to-multipoint broadband wireless access (BWA) systems providing multiple services. The MAC is structured to support multiple PHY specifications, each suited to a particular operational environment.

SDO	Document No.	Status	Issued date	Location
IEEE	IEEE Std 802.16-2009	Published	2009-05-29	http://standards.ieee.org/getieee802/802.16.html

5.6.2.2.2 WiMAX Forum® Mobile System Profile

The complete WiMAX Forum® Mobile System Profile, Release 1.5 is included in the following volumes.

5.6.2.2.2.1 WiMAX Forum® Mobile System Profile specification: Release 1.5 – Common part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features common to both the TDD and FDD operational modes. It has the following table of contents:

1 Scope

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

2 References

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

3 Definitions

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

4 PHY profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

5 MAC profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

6 Security

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

7 Radio profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

8 Power class profile

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-001-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-001-R015v01_MSP-Common-Part.pdf

5.6.2.2.2 WiMAX Forum® Mobile System Profile specification: Release 1.5 – FDD specific part

This specification describes the features of the WiMAX Forum® Mobile System Profile, Release 1.5. It includes the features specific to the FDD operational mode. The content refers to the physical and the MAC layers.

SDO	Document No.	Status	Issued date	Location
WiMAX Forum	WMF-T23-003-R015v01	Approved	2009-08-01	http://wimaxforum.org/imt-2000/9/WMF-T23-003-R015v01_MSP-FDD.pdf

5.6.2.2.3 WiMAX Forum® Mobile Radio Specification

This specification describes the radio features of the WiMAX Forum® Mobile System Profile, Release 1.5.

SDO	Version	Status	Issued date	Location
WiMAX Forum	0.3.1	As provided in the GCS	2009-02-02	http://wimaxforum.org/imt-2000/7/MRSv031.zip

6 Recommendations on unwanted emission limits

6.1 Terrestrial radio interfaces

The information on emissions limits is recommended in Recommendation ITU-R M.1581 – Generic unwanted emission characteristics of mobile stations using the terrestrial radio interfaces of IMT-2000, and in Recommendation ITU-R M.1580 – Generic unwanted emission characteristics of base stations using the terrestrial radio interfaces of IMT-2000.

Annex 1

Abbreviations

AES	Advanced encryption standard
ARQ	Automatic repeat request
BCMCS	Broadcast multicast services
BE	Best-effort
BMC	Broadcast/multicast control
BS	Base station
BWA	Broadband wireless access
CCM	Cipher block chaining message authentication code
CDMA	Code division multiple access

CID	Connection identifier
CN	Core network
CP	Cyclic prefix
CS	Convergence sub-layer
DECT	Digital Enhanced Cordless Telecommunications
DL	Downlink
DLC	Data link control layer
DL_MAP	Downlink map
DPRS	DECT packet radio service
DRC	Data rate control
DS-CDMA	Direct Spread CDMA
E-UTRAN	Evolved UTRAN
EAP	Extensible authentication protocol
EDGE	Enhanced data rates for GSM evolution
EDGE/GPRS	(EGPRS2) – EDGE evolution – Evolved enhanced data rates for GSM evolution
ErtPS	Extended real-time packet service
FBSS	Fast base station switching
FCH	Frame control header
FDD	Frequency division duplex
FDMA	Frequency division multiple access
FEC	Forward error correction
FER	Frame error ratio
FFT	Fast Fourier Transform
FLO	Flexible layer one
GERAN	GSM/EDGE radio access network
H-ARQ	Hybrid – ARQ
HHO	Hard handover
HRPD	High rate packet data
HSDPA	High-speed downlink packet access
IEEE	Institute of Electrical and Electronics Engineers
IMS	IP multimedia subsystems
IWU	Inter-working unit
LAC	Link access control
LDPC	Low density parity check code
LLC	Logical link control layer
MAC	Medium access control
MAC CPS	Common part sub-layer
MBMS	Multimedia broadcast/multicast service
MC	Multi-carrier
MDHO	Macro diversity handover
MEID	Mobile equipment identifier
MIMO	Multiple-input/multiple-output
MM	Mobility management

nrtPS	Non-real-time packet service
OFDM	Orthogonal frequency-division multiplexing
OFDMA	Orthogonal frequency-division multiple access
PDCP	Packet data convergence protocol
PDU	Protocol data unit
PHS	Payload header suppression
PHY	Physical layer
QoS	Quality of Service
RLC	Radio link control
RNC	Radio network controller
RNS	Radio network sub-systems
RRC	Radio resource control
RRI	Reverse rate indicator
RTG	Receive/transmit transition gap
rtPS	Real-time packet service
R-UIM	Removable UIM
SA	Security association
SAP	Service access points
SC	Single-carrier
SDO(s)	Standards development organization(s)
SDU	Service data unit
SIR	Signal-to-interference ratio
SIM	Subscriber identity module
SMS	Short message service
SS	Subscriber station
TEK	Traffic encryption key
TDD	Time division duplex
TDMA	Time division multiple access
TPC	Transmit power control
TTG	Transmit/receive transition gap
TTI	Transmission time interval
UE	User equipment
UGS	Unsolicited grant service
UL	Uplink
UL_MAP	Uplink map
U-Plane	User plane
USIM	Universal SIM
UTRA	Universal Terrestrial Radio Access
UTRAN	UMTS terrestrial radio access network
WCDMA	Wideband CDMA
WMAN	Wireless metropolitan area network
