INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.1290

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(10/95)

INTELLIGENT NETWORK

GLOSSARY OF TERMS USED IN THE DEFINITION OF INTELLIGENT NETWORKS

ITU-T Recommendation Q.1290

(Previously "CCITT Recommendation")

FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

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The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation Q.1290 was revised by ITU-T Study Group 11 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 17th of October 1995.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

SUMMARY

This Recommendation provides a glossary of terms and definitions which have been studied for application in the documentation of intelligent networks. These terms will also be incorporated in Recommendation Q.9, "Vocabulary of Switching and Signalling Terms".

TMN management systems terminology needs to be harmonized with IN terms and is not included in this version of this Recommendation.

The text in this Recommendation is considered to be stable. Companion Recommendations include the Q.1200-Series of Recommendations.

Recommendation Q.1290

GLOSSARY OF TERMS USED IN THE DEFINITION OF INTELLIGENT NETWORKS

(Helsinki, 1993; revised in 1995)

1 General

1.1 Introduction

This Recommendation provides a glossary of terms and definitions which have been studied for application in the documentation of intelligent networks. These terms will also be incorporated in Recommendation Q.9, "Vocabulary of switching and signalling terms".

To the extent practicable, terms that have been defined previously are used unchanged and reference to the source of the definition is shown next to the term in parenthesis. The definitions that have been changed to make them appropriate for this application are considered to be new definitions; however, reference to the source definition is also shown in parenthesis.

1.2 Conventions

The following notations and styles are used in the text of this Recommendation as appropriate:

1) The names of IN CS-1 SIBs are written with each component word capitalized and spaces between the words (e.g. LOG CALL INFORMATION).

2) The names of IN CS-1 information flows are written with each component word capitalized and spaces between the words and the appropriate type descriptor is included (e.g. Call Information Report req.ind.).

3) The names of information elements in IN CS-1 information flows are written with each component word capitalized and spaces between the words (e.g. Request Information).

4) The abbreviation for the word identity in a IN CS-1 information element is written ID.

5) The names of IN CS-1 detection points are written with each component word capitalized and underscores between the words (e.g. O_Disconnect).

6) Other names defined are not capitalized, (e.g. detection points).

7) The names of information flows defined in Recommendation Q.71 are written in upper case and the appropriate type descriptor is included (e.g. SETUP req.ind).

8) The names of the personal mobility procedures defined in Recommendation F.851 are written as in InCall, OutCall and AllCall registration and deregistration.

2 Terms and definitions (listed alphabetically)

For the purposes of this Recommendation, the following definitions apply:

2.1 **access**: A means of interaction between a user and a network.

2.2 **access channel (Q.9 – 0008, I.112 – 414)**: A designated part of the information transfer capability having specified characteristics, provided at the user-network interface.

2.3 **access code**: A code(s) for "customized numbering plan(s)": attendant access, escapes to public network, etc.

2.4 **access function**: A set of processes in a network that provide for interaction between the user and a network.

2.5 adjunct (AD): An entity in the intelligent network that is functionally equivalent to a service control point but is directly connected to a service switching point.

2.6 Administration: In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunications administration and a recognized operating agency.

2.7 agent: Entity acting on behalf of another.

2.8 alerting pattern: A specific pattern used to alert a subscriber (e.g. distinctive ringing, tones, etc.). Recommendation Q.931 refers.

2.9 application (I.3 – Z.341): A set of functions required to perform a "*job*".

2.10 application context (AC): An Application Context describes the functions which are to be used for a particular instance of communication.

2.11 application context negotiation (ACN): Context negotiation establishes at the beginning of a transaction which set of user protocol ASEs will be potentially exchanged during a transaction.

2.12 application entity (AE) (Q.9 – 2156 modified): The system-independent application activities which are made available as application services to the application agent, e.g. a set of application service elements which together perform all or part of the communication aspects of an application process.

2.13 application entity invocation (AEI): The actual "run-time" program that performs all or a subset of the communication functions defined by the AE-type specifications.

2.14 application program: Logic residing in the service control and service management realms that directs and/or controls the performance of actions in the network to provide and/or manage the provision of IN service features.

2.15 application programming interfaces (APIs): Interfaces that support the process of creating, installing, testing, modifying, etc. IN application programs.

2.16 application protocol data unit (APDU): A unit of application data specified in an application protocol and consisting of application protocol control information and application protocol user data.

2.17 application service element (ASE) (Q.9 – 2158 modified): A coherent set of integrated functions to help accomplish application communication, e.g. within an application entity.

2.18 apply charging (APC): A means of requesting charging information.

2.19 apply charging report (APR): A means of reporting charging information.

2.20 architecture: Any ordered arrangement of the parts of a system.

2.21 association: A logical relationship between entities exercized in performing a function.

2.22 atomicity (X.851 – 3.7.9): A property of a set of related operations such that the operations are either all performed or none of them are performed.

2.23 attribute: Refer to 8.1/X.501.

2.24 basic call: A call between two users that does not include additional features (e.g. a plain telephone call).

2.25 basic call process (BCP): The sequence of activities used in processing a basic call attempt.

2.26 basic call state model (BCSM): A high-level finite state machine model of call processing for basic call control (i.e. a two party non-IN call). The model might only cover a portion of a call attempt, e.g. an originating BCSM or terminating BCSM, or the whole attempted call connection, originating user to terminating user.

2.27 basic rate interface (BRI) (Q.9 – 1551): A user-network access arrangement that corresponds to the interface structure composed of two B-channels and one D-channel. The D-channel for this type of access is 16 kbit/s.

2.28 bearer control: The set of functions used to direct the low layer (common) means of transmission.

2.29 bind: A mechanism used during Association Control for authentication. Refer to Recommendation X.500.

2.30 business group identity (BGID): The Basic Business Group or Multiswitch Business Group Identity of the calling/called party, e.g. group based services.

2.31 call (Q.9 – 0009-2 Revised by omitting Note): The use, or possible use, of one or more connections set up between two or more users and/or service(s).

2.32 call control: The set of functions used to process a call (e.g. provide service features and establish, supervise, maintain and release connections).

2.33 call control agent function (CCAF): A functional entity that provides network access functions for users, interacting with call control functional entities in providing services.

2.34 call control function (CCF): The network intelligence that provides call/connection processing and control.

2.35 call control functional entity: Functional entities which cooperate with each other to provide network call processing functions.

2.36 called party business group ID: Identifies the business group associated with the called party.

2.37 called party subaddress: The subaddress information identifying the called party.

2.38 call gapping encountered: Indicates the type of gapping the request for instructions have been subjected to, if any.

2.39 calling facility group: Identifier for incoming trunks or private facilities.

2.40 calling facility group member: Identifier for individual member of a facility group.

2.41 calling party business group ID: Identifies the business group associated with the calling party.

2.42 calling party subaddress: The subaddress information identifying the calling party.

2.43 calling user: The entity which originates a call to the service.

2.44 call instance data (CID): An identifier that defines subscriber specific details (i.e. value will change with each call instance) for service independent building blocks in the global functional plane.

2.45 call manager (CM): The entity in the SSF that provides mechanisms to support multiple concurrent instances of IN service logic instances and non-IN service logic instances on a single call.

2.46 call model: A representation of functions involved in processing a call.

2.47 call/service processing: The execution of logic by a switching or control function to advance a call attempt or a service request.

2.48 call segment: A specific portion of the processing of a call.

2.49 call segment model (CSM): A representation of the processing of a call in terms of call segments.

2.50 capability set (CS): A set of intelligent network capabilities that are to be the subjects of standardization activities and for which the availability of Recommendations will be targeted for a particular time frame.

2.51 carrier access code (CAC): A code used to select a carrier.

2.52 carrier (commercial telecommunications): The organization whose function is to provide the particular service, e.g. an agent of a private network/facility, intra-serving area, or a specific inter-exchange carrier or international carrier.

2.53 carrier identification code: Identifies the carrier.

2.54 carrier selection: Identifies whether the caller dialled the selected carrier and whether the caller pre-subscribed to the selected carrier.

2.55 charge number: The number to be charged for the call.

2.56 class of service: This is either a Customer Class of Service, a Trunk Class of Service, or a Private-Facility Class of Service. It may refer to either originating or terminating accesses.

2.57 collected address information: An interpretation of the dialled digits specifying the nature of address and the called party number.

2.58 collected digits: A variable number of digits collected.

2.59 common management information system (CMIS): See Recommendation X.700.

2.60 connection (Q.9 – 0011): An association of transmission channels or circuits, switching and other functional units set up to provide a means for a transfer of information between two or more points in a telecommunications network.

2.61 connection control: The set of functions used for setting up, maintaining and releasing a communication path between two or more users or a user and a network entity, e.g. a dual tone multifrequency receiver.

2.62 consumer: Refer to Recommendation X.880.

2.63 control: To exercise a directing influence.

2.64 control window: An interval during which an entity involved in call/service processing is subject to the control of the service control function.

2.65 core feature: A service feature that is fundamental to a service, i.e. in the absence of the feature, the service is not a viable service offering.

2.66 customized dialling plan (CDP): Also known as “customer numbering plan” or “private numbering plan”, see “Access Code”.

2.67 data: User and/or network information stored in the network used in connection with call/service processing. An instance of a data object.

2.68 database: An entity that stores information.

2.69 data management: Establishing, updating and administering databases in the network.

2.70 data object: An individually addressable unit of information specified in a data template.

2.71 data template: A specified logical structure for a collection of data objects, including allowable ranges for their values and other data consistency specifications.

2.72 destination routing address: A list of called party numbers (primary and alternative).

2.73 detection point (DP): A point in basic call processing at which a processing event may be reported to the service control function and transfer of processing control can occur.

2.74 destination user: The entity to which calls are directed.

2.75 dialled digits: Untranslated address information collected/received from the originating line/trunk.

2.76 dialog(ue): A conversation or an exchange of information.

2.77 **digital subscriber signalling No. 1 (DSS 1)**: Q.931 Signalling specification for frame mode basic call control.

2.78 **directory**: Refer to clause 12/X.500.

2.79 **directory access protocol (DAP)**: Refer to clause 12/X.500.

2.80 **directory entry (DE)**: Refer to 7.1/X.501.

2.81 **directory information tree (DIT)**: Refer to 7.1/X.501.

2.82 **directory system protocol (DSP)**: Refer to clause 12/X.500.

2.83 **directory user agent**: Refer to 6.1/X.500.

2.84 **distinguished name (DN)**: Refer to 9.1/X.501.

2.85 **distributed functional plane (DFP)**: The plane in the intelligent network conceptual model containing functional entities and their relationships.

2.86 **distributed service logic (DSL)**: Logic in the distributed functional plane that is used to realize service independent building blocks.

2.87 **domain**: Refer to IN domain.

2.88 **dual tone multi-frequency (DTMF)**: A push button dialling method used to direct inband signalling entities.

2.89 **dynamic arming/disarming**: Enabling/disabling of a detection point by a service control function in the course of service control execution for a particular call/service attempt.

2.90 **dynamic data**: Information subject to change as a result of call/service processing.

2.91 **element**: An identifiable physical unit.

2.92 **elementary function**: A primary or basic function that cannot be further decomposed.

2.93 **entity (Q.9 – 7110)**: A part, device, subsystem, functional unit, equipment or system that can be individually considered. In ISDN the term is used to refer to a particular system or subsystem such as a user terminal or a digital exchange. It is also used to refer to a set of functions of a particular system at a location, e.g. the layer 2 functions of a signalling system at a user terminal.

2.94 **event**: A specific input to and/or output from a given state in a finite state machine model that causes a transition from one state to another.

2.95 **event detection point (EDP)**: A detection point that is dynamically armed.

2.96 **executive process**: A process that controls the execution of other processes.

2.97 **facility code**: Code(s) used to select/activate a facility related service, e.g. a two digit code preceded by # to select a preferred routing.

2.98 **facility group**: Indicates the particular group of facilities to route the call.

2.99 **facility group member**: Indicates the specific member of a trunk group or a multi-line hunt group.

2.100 **facility restriction level (FRL)**: The permission level associated with an incoming facility, e.g. trunk line.

2.101 **feature**: A re-usable capability provided to a user by one or more services in a network.

2.102 **feature code**: Code(s) used to select/activate a service feature (e.g. forwarding, using two or three digit codes preceded by * or 11 or #, and which may precede subsequent digit selection).

2.103 feature interaction: A situation that occurs when an action of one feature affects an action or capability of another.

2.104 feature interactions manager: See definition 2.45.

2.105 finite state machine (FSM): A system having a finite number of states and specified transitions between states.

2.106 finite state machine model: An operational model of an entity that is described by the finite set of states the entity can be in and the finite set of transitions possible from one state to another.

2.107 function (I.112 – 403): A set of processes defined for the purpose of achieving a specified objective.

2.108 functional entity (Q.9 – 7112): An entity that comprises a specific set of functions at a given location.

2.109 functional entity (Q.9 – 7113) (In telecommunications service provision applications): A grouping of service providing functions in a single location and a subset of the total set of functions required to provide the service.

2.110 functional entity action (FEA): An action performed by a functional entity as a result of a specific stimulus while the functional entity is in a specific state.

2.111 functional routine: Logic that controls the performance of a set of actions to accomplish "routine" tasks, e.g. retrieve information, pass information, etc.

2.112 furnish charging information (FCI): A means of interacting to request information to enable the production of billing record information based upon call record information.

2.113 generic name: This identifier, if present, carries name characters and presentation status for the calling and redirecting users.

2.114 global control: Control of a process whose functions are distributed among several entities.

2.115 global functional plane (GFP): The plane in the intelligent network conceptual model which defines Service Independent Building Blocks (SIBs) used in providing service features.

2.116 global service logic (GSL): Logic in the global functional plane that is used to realize features.

2.117 global virtual network services (GVNS) (CS-2): These are the participating services of the global switched GVNS service.

2.118 home network: The geographical area of the network where the user normally resides, or the service provider is associated with.

2.119 high level SIB (HLSIB) (CS-2): A reusable part of a service feature as normal SIBs, but composed out of SIBs and other HLSIBs which can be executed sequentially. A HLSIB stands for abstraction by hiding service logic and parts of the 'service support data' that is considered to be local to the HLSIB.

2.120 inband (inband signalling Q.9 – 2010): A signalling method in which signals are sent over the same transmission channel or circuit as the user's communication and in the same frequency band as that provided for the users – an example is DTMF.

2.121 independent or independence: Not necessarily specific to one aspect.

2.122 information flow (Q.9 – 7120): An interaction between a communicating pair of functional entities.

2.123 intelligent network (IN): A telecommunications network architecture that provides flexibility for facilitating the introduction of new capabilities and services, including those under customer control.

2.124 intelligent network application protocol (INAP): A protocol for intelligent network applications contained in layer 7 (application of the OSI model).

2.125 IN conceptual model (INCM): A planning model used for defining the intelligent network architecture.

2.126 IN data base (INDB): A physical entity used for information storage in the intelligent network.

2.127 IN database management system (INDBMS): A system used for establishing and/or administering information storage in the intelligent network.

2.128 IN domain (CS-2): A part of an IN structured network encapsulating predefined roles, (e.g. network operator or service provider).

2.129 IN supported service: A service provided using the capabilities of the intelligent network.

2.130 IN switching manager (IN-SM): The entity in the SSF that interacts with the SCF in the course of providing IN service features to users.

2.131 IN switching state model (IN-SSM): Provides an object-orientated finite state machine description of SSF/CCF IN call/connection processing in terms of IN call/connection states.

2.132 integrated services digital network (ISDN): See 2.3/I.112, definition 308.

2.133 intelligent peripheral (IP): A physical entity that implements the intelligent network specialized resource function.

2.134 ISDN user part (ISDN-UP) Q.761: The Signalling System No. 7 protocol which provides the signalling functions required to support basic bearer services and supplementary services for voice and non-voice applications in an integrated services digital network.

2.135 ISUP: Acronym for ISDN-User Part.

2.136 inter working function (CS-2): Functionality separating interworking functions from other independent functional or physical architectures.

2.137 interface (Q.9 – 4001): A shared boundary, for example, the boundary between two subsystems or two devices.

2.138 IP available: Indication whether or not an IP is attached, and available at the SSP.

2.139 IPSSP capabilities: Indication of which SRF resources are supported, and attached at the SSP from which the call was suspended.

2.140 layer (Q.9 – 2160): A conceptual region that embodies one or more functions between an upper and a lower logical boundary within a hierarchy of functions.

2.141 leg: A representation within a call processing state model representing a telecommunication path towards some addressable entity (e.g. a path toward a user, intelligent peripheral unit, etc.).

2.142 library: An assembly of objects, routines, programs, etc. that may be drawn upon for use in the performance of functions.

2.143 local exchange (LE) (local central office) (Q.9 – 1002): An exchange in which subscriber lines terminate.

2.144 manager: A function that directs and/or controls operations of a function or an assembly of functions to allow a functional entity to perform all or a part of the expected functional entity actions.

2.145 management: The function of directing, maintaining and/or administering.

2.146 management function (M.60 modified): A set of processes used for the management of an entity (e.g. database management capabilities covering maintenance of operations, administration, maintenance, and provisioning).

2.147 management building block: A re-usable set of functional entity actions and information flows used to provide service management functions in the network.

2.148 monitor window: An interval during which an entity performs the monitoring function at the direction of a service control function.

2.149 multiple association control function (MACF): Represents the rules and regulations governing the coordination of set of peer-to-peer communications within an application entity invocation (AEI).

2.150 network: See CCITT Volume I, Fascicle I.3.

2.151 network access point (NAP): A physical entity that provides network access for users. It contains the call control agent function and may include the call control function.

2.152 network data: Data that is specific to the functionality of the network.

2.153 network functional architecture (NFA): The functional block which consists of the network elements.

2.154 network implementation independence: Not dependent on a specific network configuration.

2.155 network interworking: The cooperation of networks to process, manage and create services, which span multiple networks.

2.156 network manager (NM): The Network Manager is the entity providing the basic switching and transmission capabilities as well as the service execution capabilities (offered by the SCP, SDP and IP) to the Service Manager. The NM is also responsible for the development and maintenance of the transmission, switching and service execution capabilities. The NM encompasses both the TMN network management functionality and the network element management functionality.

2.157 network operator: The network operator is responsible for the development, provision and maintenance of real-time networking services and for operating the corresponding networks.

2.158 network provider: The organization that maintains and operates the network components required for IN functionality. A network provider may also take more than one role, e.g. also acting as Service Provider.

2.159 object: An intrinsic component of an entity that is described at an appropriate level of abstraction in terms of its attributes and functions.

2.160 operator services information: Information sent between operator services entities identifying charging and service type options.

2.161 optional feature: A service feature added to core features to optionally enhance a service offering.

2.162 open systems interconnection (OSI): The concept of interconnecting systems in accordance with the architecture described in the Open System Interconnection Reference Model. Refer to Recommendation X.200.

2.163 original called party ID: Refer to Recommendation Q.762.

2.164 originating line information (OLI): Information indicating a toll class of service for the call.

2.165 persistent data: Information that endures beyond a single instance of use, e.g. longer than one call attempt.

2.166 personal mobility (PM): The flexibility of the user's access to telecommunications service provision enabling the user to associate with and/or configure any terminal to meet individual requirements.

2.167 prefix: Any prefix digits that need to be input by the calling party, e.g. 00.

2.168 physical plane: The plane in the intelligent network conceptual model containing elements and their interfaces that implement functional entities.

2.169 plain old telephone service (POTS): A call that requires nothing more than basic call handling.

2.170 plane: A part of the intelligent network conceptual model.

2.171 point in call (PIC): A state in a basic call state model.

2.172 point of control (POC) (CS-2): A set of functional interfaces between service logic of two different service processes. Possible points of control are: "point of initiation", "point of synchronization", and "point of return" which is considered to be a specialized point of synchronization. Inter process data is conveyed via point of controls.

2.173 point of initiation (POI): A functional interface between a service process (including the basic call process) and service logic of another service process to initiate (further) service processing.

2.174 point of return (POR): A functional interface between service logic of a service process and basic call processing over which call processing control is returned to basic call processing, whereby the execution of the service logic of the service process is terminated. A point of return is considered to be a specialized point of synchronization.

2.175 point of synchronization (POS) (CS-2): A functional interface between service logic of two service processes over which asynchronous communication is initiated, i.e. the execution of the service logic that has a point of synchronization connected to it, has to wait until the synchronization signal has arrived. Synchronous communication may be achieved by performing a handshake with the two points of synchronization.

2.176 primary rate access (PRI) (Q.9 – 1552): A user-network access arrangement that corresponds to the primary rates of 1544 kbit/s and 2048 kbit/s. The bit rate of the D-channel for this type of access is 64 kbit/s.

2.177 private telecommunication network exchange (PTNX): Telecommunications switching functionality for private telecommunication network(s) providing automatic switching and call handling functions for various types of ISDN customer premises equipment, including, e.g. PABXs, Centrex and Multiplexers.

2.178 population rules: Condition(s) and respective values for inclusion, e.g. semantics to enable formation of operations sent by the SSF to the SCF using particular information elements.

2.179 protocol layer (based on Q.9 – 2160 – definition of "layer":): A group of one or more functions within an upper and lower logical boundary within a protocol reference model. [Layer (N) has boundaries to layer (N + 1) and to layer (N – 1).]

2.180 public switched telephony network (PSTN): A telecommunications network set up (and administered by an "Administration") to perform telephonic services for the public subscribers.

2.181 redirection information: Refer to Recommendation Q.763.

2.182 relationship (Q.65): The complete set of information flows, where they exist, between two functional entities.

2.183 recognized operating agency (ROA): Refer to "Administration".

2.184 relative distinguished name (RDN): Refer to 9.1/X.501.

2.185 resource: In telecommunications, any network element that can be drawn upon in providing service, e.g. a circuit, a receiver, etc.

2.186 route list: A list of trunk groups or a "route index" (if the call does not terminate on this SSF/CCF).

2.187 route index: A pointer to a specific trunk group.

2.188 send charging information (SCI): A means to enable the demands of the SLP for charging information that is sent back down the call path.

2.189 service (Q.9 – 7011, modified): That which is offered by an Administration or ROA to its customers in order to satisfy a telecommunication requirement.

2.190 service address information: Information that represents the result of trigger analysis and allows the SCF to choose the appropriate service logic.

2.191 service control: Direction of the functions or processes used to provide a specific telecommunications service.

2.192 service control customisation: Functionality to personalize a stand-alone commercial offering, by the server on behalf of a client.

2.193 service control function (SCF): The application of service logic to control functional entities in providing intelligent network services.

2.194 service control function identifier (SCFID): Indicates the SCF and enables the assisting SSF to identify which SCF the assist request instructions should be sent to.

2.195 service control point (SCP): An entity in the intelligent network that implements a service control function.

2.196 service creation: An activity whereby the capability to provide a supplementary service is brought into being from specification to development and verification.

2.197 service creation environment (SCE): The set of functions to support service creation processing by altering service logic and service data on behalf of the controlling node.

2.198 service creation environment function (SCEF): The set of functions that supports the service creation process, the output of which includes both service logic programs and service data.

2.199 service creation environment point (SCEP): A physical entity that implements the service creation environment function.

2.200 service creation platform: A set of service independent objects or functions which allow the creation of services in an intelligent network.

2.201 service creation process: The conception, design and implementation of a capability to provide a service.

2.202 service data: Customer and/or network information required for the proper functioning of a service.

2.203 service data function (SDF): The set of functions that provides for the management of service data in accordance with a service data template.

2.204 service data point (SDP): A physical entity that implements a service data function.

2.205 service data template: A data template related to a specific service logic program.

2.206 service feature (SF): A re-usable part of one or more service capabilities forming all or part of a service.

2.207 service independence: Not necessarily specific to one service.

2.208 service independent:

1) not dependent on the availability of other services; or

2) having freedom to create any service desired.

2.209 service independent building block (SIB): A re-usable set of functional entity actions and information flows used to provide a service feature or a part of a service feature in an intelligent network.

2.210 service logic (SL): A sequence of processes/functions used to provide a specific service.

2.211 service logic control program (SLCP): Functionality that a service control node runs to realize a service feature.

2.212 service logic management program (SLMP): The set of functionality that a management node runs to support the management of user and/or network information.

2.213 service logic processing program (SLP): A software program containing service logic.

2.214 service logic processing program (use) instance (SLPI): The invocation and application of a particular service logic program in providing a service or a service feature for a specific call/service attempt.

2.215 service manager (SM) (CS-2): The Service Manager is the actor who provides the IN-based services to its customers on a contractual basis, and who is responsible for the services offered. The SM uses the service execution, transmission and switching capabilities offered by the Network Manager to offer the services to its customers.

2.216 service management: Management of user and/or network information required for the proper operation of a service.

2.217 service management access function (SMAF) (CS-2): A functional interface between network operators and/or subscribers and network service management functional entities.

2.218 service management agent function (SMAF): The entity equivalent to the work station function between network operators and/or subscribers and network service management functional entities.

2.219 service management function (SMF): The set of processes that support the management of user and/or network information, including service data and service logic programs that are required for the proper operation of a service.

2.220 service management point (SMP): A physical entity that implements a service management function.

2.221 service management system (SMS): A set of service management functions.

2.222 service node (SN): A physical entity that contains the service control function, service data function, specialized resource function and service switching/call control functions. The SSF/CCF is closely coupled to the SCF within the SN and is not accessible by other SCFs.

2.223 service plane: The plane in the intelligent network conceptual model that contains services, service entities and their relationships.

2.224 service process: A chain of "service independent building blocks" or "high level service independent building blocks" executed sequentially, but may be in parallel with other service processes. Service processes are initiated via a "point of initiation" and synchronized via "point(s) of synchronization". A service process is always contained within one "domain". A process in one domain is able to spawn new processes and to communicate with processes in other domains or its own domain. The "points of control" and "call instance data" crossing the border of two domains is part of their logical interface. The "basic call processing" can be regarded as a specialized service process.

2.225 service processing: The execution of service control and basic call processing functions to provide a service.

2.226 service provider: An organization that commercially manages services offered to service subscribers. The network operator may be the service provider.

2.227 service subscriber (SS): An entity that contracts for services offered by Service Providers.

2.228 service switching and control point (SSCP): A physical entity that contains the service control function, service data function and the service switching/call control functions.

2.229 service support data (SSD): An identifier that defines data parameters of specific service feature descriptions for service independent building blocks in the global functional plane.

2.230 service switching function (SSF): The set of processes that provide for interaction between a call control function and a service control function.

2.231 service switching management entity (SSME): Functionality of an entity controlling the system management of the node.

2.232 service switching point (SSP): A physical entity that implements a service switching function.

2.233 service trigger information (STI): A stimulus information for initiating an action. It may be distinguished between "trigger detection point" initiating the "service logic" and "event detection point" reporting an event to the running "service logic".

2.234 service user (SU): An entity external to the network that uses its services.

2.235 serving area ID: Identifies the local serving area where the network provider operates.

2.236 single association control function (SACF): Represents the rules and regulation governing the use of the ASEs that are being used for communication over a single Application Association to a peer.

2.237 single association object (SAO): The representation of the functions that are needed to communicate over a single Application Association to a peer.

2.238 single-ended service feature: A feature, e.g. call/service attempt manipulation, that applies to only one of the parties that may be involved on a call/service attempt.

2.239 single point of control: A control relationship where the same phase or aspect of a call/service attempt is influenced by one, and only one, service control function.

2.240 SRF available: Indicates the status of the SRF attached to the SSF, if an SRF is attached.

2.241 SRF/SSF capabilities: SSF and SRF capabilities is used to indicate the capabilities of the SSF and SRF to the SCF. (e.g. the SCF uses this information to decide if an assist or hand-off procedure is to be used).

2.242 specialized resource function (SRF): The set of functions that provides for the control and access to resources used in providing services in the intelligent network.

2.243 state (in FSM): A description of an entity defined by the values of its object attributes at a given point in time.

2.244 state (in SDL) (Q.9 – 6942): A condition in which the action of a process is suspended awaiting an input.

2.245 static arming/disarming: Enabling/disabling of a detection point, as directed by a service management function, to cause a specified action by call/service processing whenever a specific point in call/service processing is encountered.

2.246 static data: Information that remains unchanged for the duration of a call or incident of use of a service. (Usually controlled by a source external to the network.)

2.247 supplemented call: A basic call with added service features or capabilities.

2.248 supplier: see Recommendation X.880.

2.249 telecommunication management network (TMN): The entity which provides the means used to transport and process information related to management functions for the telecommunications network.

2.250 terminal type: Indicates the type of terminal to the SCF (e.g. DTMF phone, ISDN terminal).

2.251 transaction (Fascicle I.3): An association between two TC providers.

2.252 transaction capabilities (TC) Q.771: A means based upon the OSI Reference Model to support applications in telecommunications networks.

2.253 transaction capabilities application part (TCAP) (Q.771): The Application layer services and protocols at layer 7 of the OSI model consisting of the Component sub-layer and the Transaction sub-layer.

2.254 transit network selection: This identifier if present, identifies the Carrier Identification Code and the Circuit Code.

2.255 transition: In a finite state machine model, a change in the state of an entity resulting from a change in the values of its object attributes.

2.256 travelling class mark: Provides information for routing or screening and allows for carrying class of service information along with calling number through a network. An example of travelling class mark is the means to override facility restriction level as a call is routed through a network.

2.257 trigger: A stimulus for initiating an action.

2.258 trigger detection point (TDP): A detection point in basic call processing that is statically armed.

2.259 type of call: e.g. “local”, “national”, “international”, etc.

2.260 universal personal telecommunications (UPT): A telecommunications service which enables access to telecommunications services while allowing personal mobility.

2.261 unbind: A mechanism used during Association Control for authentication. Refer to Recommendation X.500.

2.262 user: An entity external to the network that uses its service(s).

2.263 vendor or implementation independent: The characteristic that products from different vendors are able to work together in the same environment, and/or, physical units serving as the same functional entity(ies) produced by different vendors can be used interchangeably.

2.264 virtual private network (VPN): When existing, all the business groups and/or PBXs on the host network which belong to the same customer private network.

2.265 work station: A physical entity that is a grouping of equipment containing local processing capabilities and terminal facilities to provide means for communications between the user and other blocks of functionality.

Annex A

Acronyms

(This annex forms an integral part of this Recommendation)

AD	Adjunct
AC	Application Context
ACN	Application Context Negotiation
ACSE	Application Control Service Element
AE	Application Entity
AEI	Application Entity Invocation
API	Application Programming Interface
APCI	Application Protocol Control Information
APDU	Application Protocol Data Unit
ASE	Application Service Element
AOC	Advice of Charge
APC	Apply Charging
APR	Apply Charging Report
BCP	Basic Call Process
BCSM	Basic Call State Model
BRI	Basic Rate Interface
BGID	Business Group Identity
CAC	Carrier Access Code
CCAF	Call Control Agent Function
CCF	Call Control Function
CDP	Customized Dialling Plan
CHA	Component Handler
CID	Call Instance Data
CM	Call Manager
CMIS	Common Management Information System
CSM	Call Segment Model
CS	Capability Set
DAP	Directory Access Protocol
DET	Determination
DFP	Distributed Functional Plane
DHA	Dialogue Handler
DLE	Destination Local Exchange
DN	Directory Number
DN	Distinguished Name
DSA	Directory System Agent
DSL	Distributed Service Logic
DSP	Directory System Protocol
DSS 1	Digital Subscriber Signalling No. 1
DP	Detection Point

DTMF	Dual Tone Multi Frequency
DUA	Directory User Agent
EDP	Event Detection Point
EDP-N	Event Detection Point-Notification
EDP-R	Event Detection Point-Request
FCI	Furnish Charging Information
FEA	Functional Entity Action
FEAM	Functional Entity Access Manager
FIM	Feature Interactions Manager
FPLMTS	Future Public Land Mobile Telecommunication Systems
FRL	Facility Restriction Level
FSM	Finite State Machine
GEN	Generation
GFP	Global Functional Plane
GSL	Global Service Logic
GVNS	Global Virtual Network Services
HLSIB	High Level Service Independent Block
IAF	Intelligent Access Function
IEC	International Electrotechnical Commission
IN	Intelligent Network
INAP	Intelligent Network Application Protocol
INCM	IN Conceptual Model
INDB	IN Database
INDBMS	IN DataBase Management System
IN-SM	IN Switching Manager
IN-SSM	IN Switching State Model
IP	Intelligent Peripheral
ISDN	Integrated Services Digital Network
ISO	International Organization for Standardization
ISUP	Integrated Services Digital Network-User Part
ISDN-UP	ISDN User Part
ISUP	ISDN-UP
ITU-T	International Telecommunication Union – Telecommunication Standardization
LE	Local Exchange
MACF	Multiple Association Control Function
NAP	Network Access Point
NEF	Network Element Function
NFA	Network Functional Architecture
NM	Network Manager

NSAP	Network Service Access Point
OFC	Off-line Charging (billing/accounting information)
OLE	Originating Local Exchange
OLI	Originating Line Information
ONC	On-line Charging (user access information)
OSF	Operator System Function
OSI	Open Systems Interconnection
OUT	Output
PM	Personal Mobility
PIC	Point In Call
POC	Point of Control
POI	Point of Initiation
POR	Point of Return
POS	Point of Synchronization
PRI	Primary Rate Interface
PTNX	Private Telecommunication Network Exchange
PSTN	Public Switched Telephony Network
RLF	Radio Link Function
REG	Registration
ROA	Recognized Operating Agency
ROS	Remote Operations
ROSE	Remote Operations Service Element
RDN	Relative Distinguished Name
SACF	Single Association Control Function
SAO	Single Association Object
SCE	Service Creation Environment
SCEF	Service Creation Environment Function
SCEP	Service Creation Environment Point
SCF	Service Control Function
SCF-FSM	Service Control Function Finite State Machine
SCFID	Service Control Function Identifier
SCI	Send Charging Information
SCME	Service Control Function Management Entity
SCME-FSM	Service Control Function Management Entity Finite State Machine
SCP	Service Control Point

SCSM	Service Control Function Call State Model
SDF	Service Data Function
SDF-FSM	Service Data Function Finite State Machine
SDL	Specification and Description Language
SDME	Service Data Function Management Entity
SDP	Service Data Point
SDSM	Service Data Function Call State Model
SF	Service Feature
SIB	Service Independent Building Block
SL	Service Logic
SLCP	Service Logic Control Program
SLMP	Service Logic Management Program
SLP	Service Logic Processing Program
SLPI	Service Logic Processing Program Instance
SM	Service Manager
SMAF	Service Management Access Function
SMAF	Service Management Agent Function
SMF	Service Management Function
SMP	Service Management Point
SMS	Service Management System
SN	Service Node
SRF	Specialized Resource Function
SRF-FSM	Specialized Resource Function Finite State Machine
SRME	Specialized Resource Function Management Entity
SRSM	Specialized Resource Function Call State Model
SS	Service Subscriber
SS7	Signalling System No.7
SSCP	Service Switching and Control Point
SSD	Service Support Data
SSF	Service Switching Function
SSF-FSM	Service Switching Function Finite State Machine
SSME	Service Switching Function Management Entity
SSME-FSM	Service Switching Function Management Entity Finite State Machine
SSP	Service Switching Point

STI	Service Trigger Information
SU	Service User
TC	Transaction Capabilities
TCAP	Transaction Capabilities Application Part
TDP	Trigger Detection Point
TDP-N	Trigger Detection Point-Notification
TDP-R	Trigger Detection Point-Request
TMN	Telecommunication Management Network
UPT	Universal Personal Telecommunication
VPN	Virtual private Network
WSF	Work Station Function

Printed in Switzerland

Geneva, 1996