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A.1	 	10-2000	Work Methods for Study Groups of the ITU Telecommunication Standardization Sector (ITU-T)	
A.2	 	10-2000	Presentation of contributions relative to the study of Questions assigned to the ITU-T	
A.3		10-1996	Elaboration and presentation of texts and development of terminology and other means of expression for Recommendations of the ITU Telecommunication Standardization Sector <i>Deleted; an "Author's Guide for drafting ITU-T Recommendations" is available on ITU-T website</i>	Withdrawn.
A.4	 	06-2002	Communication process between ITU-T and Forums and Consortia	
A.5	 	11-2001	Generic procedures for including references to documents of other organizations in ITU-T Recommendations	
A.6	 	06-2002	Cooperation and exchange of information between ITU-T and national and regional standards development organizations	
A.7	 	06-2002	Focus Groups: Working methods and procedures	
A.8	 	10-2000	Alternative approval process for new and revised Recommendations	
A.9	 	11-2003	Working procedures for the Special Study Group on IMT-2000 and Beyond	
A.11	 	10-2000	Publication of ITU-T Recommendations and WTSA proceedings	
A.12	 	10-2000	Identification and layout of ITU-T Recommendations	
A.13	 	10-2000	Supplements to ITU-T Recommendations	
A.23	 	10-2000	Collaboration with the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) on information technology	
A.23 Annex A	 	11-2001	Guide to ITU-T and ISO/IEC JTC1 cooperation	
A.30		03-1993	Major degradation or disruption of service <i>This Recommendation was deleted and its content transferred to ITU-T C.2. The latter was then renumbered F.19</i>	Withdrawn.

A-Series: Supplements to the Series A Recommendations

A.Sup2	 	06-2000	Guidelines on interoperability experiments	
A.Sup3	 	11-2001	IETF and ITU-T collaboration guidelines	

Series B: Means of expression: definitions, symbols, classification



B.1		11-1988	Letter symbols for telecommunications <i>Deleted after its content became technically out of date</i>	Withdrawn.
B.3		11-1988	Use of the international system of units (SI) <i>Deleted after its content became technically out of date</i>	Withdrawn.
B.10		11-1988	Graphical symbols and rules for the preparation of documentation in telecommunications <i>Deleted after its content became technically out of date</i>	Withdrawn.
B.12		11-1988	Use of the decibel and the neper in telecommunications <i>Deleted since its content is covered by ITU-T Rec. G.100.1</i>	Withdrawn.
B.13		11-1988	Terms and definitions <i>Deleted after its content became technically out of date</i>	Withdrawn.
B.14		11-1988	Terms and symbols for information quantities in telecommunications <i>Deleted after its content became technically out of date</i>	Withdrawn.
B.15		10-1996	Nomenclature of the frequency and wavelength bands used in telecommunications <i>Deleted; refer to ITU-R definitions</i>	Withdrawn.
B.16		11-1988	Use of certain terms linked with physical quantities <i>Deleted; refer to ITU-R definitions</i>	Withdrawn.
B.17		11-1988	Adoption of the CCITT Specification and Description Language (SDL) <i>ITU-T B.17 was deleted as its content is adequately covered by Rec. Z.110</i>	Withdrawn.
B.18		03-1993	Traffic intensity unit <i>Deleted because its content is already covered by ITU-T E.600</i>	Withdrawn.
B.19		10-1996	Abbreviations and initials used in telecommunications <i>Deleted after its content became technically out of date</i>	Withdrawn.

Series C: General telecommunication statistics

C.1		03-1993	ITU statistical yearbook <i>Deleted after the transfer of telecommunication statistics activity to ITU-D</i>	Withdrawn.
C.3		03-1993	Instructions for international telecommunication services <i>Given that the text of Rec. C.3 consists of an index to a number of Recommendations which are now of little or no practical use, it was decided to delete it. Electronic access to ITU-T Recommendations would appear to provide a better index and reference mechanisms</i>	Withdrawn.















Series D: General tariff principles

D.0-D.0: Terms and definitions









D.000   06-2002 Terms and definitions for the D-series Recommendations

D.1-D.299: General tariff principles





D.1-D.9: Private leased telecommunication facilities





D.1	 	07-1991	General principles for the lease of international (continental and intercontinental) private telecommunication circuits and networks	
D.3	 	06-1992	Principles for the lease of analogue international circuits for private service	
D.4	 	12-1998	Special conditions for the lease of international (continental and intercontinental) sound- and television-programme circuits for private service	
D.5	 	11-1988	Costs and value of services rendered as factors in the fixing of rates	
D.6		11-1988	General principles for the provision of international telecommunications facilities to organizations formed to meet the specialized international communication needs of their members	Withdrawn.
D.7	 	01-1992	Concept and implementation of "one-stop shopping" for international private leased telecommunication circuits	
D.8	 	11-1988	Special conditions for the lease of international end-to-end digital circuits for private service	
D.9	 	11-1988	Private leasing of transmitters or receivers	

D.10-D.39: Tariff principles applying to data communication services over dedicated public data networks



D.10	 	07-1991	General tariff principles for international public data communication services	
D.11	 	03-1991	Special tariff principles for international packet-switched public data communication services by means of the virtual call facility	
D.12	 	11-1988	Measurement unit for charging by volume in the international packet-switched data communication service	
D.13	 	11-1988	Guiding principles to govern the apportionment of accounting rates in international packet-switched public data communication relations	
D.15	 	11-1988	General charging and accounting principles for non-voice services provided by interworking between public data networks	
D.20	 	11-1988	Special tariff principles for the international circuit-switched public data communication services	
D.21	 	11-1988	Special tariff principles for short transaction transmissions on the international packet-switched public data networks using the fast select facility with restriction	
D.30	 	11-1988	Implementation of reverse charging on international public data communication services	
D.35	 	01-1992	General charging principles in the international public message handling services and associated applications	
D.36	 	03-1995	General accounting principles applicable to message handling services and associated applications	
D.37	 	07-1996	Accounting and settlement principles applicable to the provision of public directory services between interconnected Directory Management Domains	

D.40-D.44: Charging and accounting in the international public telegram service



D.40	 	06-1992	General tariff principles applicable to telegrams exchanged in the international public telegram service	
D.41	 	11-1988	Introduction of accounting rates by zones in the international public	

			telegram service	
D.42	 	11-1988	Accounting in the international public telegram service	
D.43	 	11-1988	Partial and total refund of charges in the international public telegram service <i>A Corrigendum was indicated in 02/1990 for the English version.</i>	









D.45-D.49: Charging and accounting in the international teletext service

D.45	 	06-1992	Charging and accounting principles for the international teletext service	
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D.50-D.59: Principles applicable to GII-Internet

D.50		11-1988	Tariff and international accounting principles for the international teletext service <i>Deleted as a consequence of the suppression of Teletext service</i>	Withdrawn.
D.50	 	10-2000	International Internet connection	



D.60-D.69: Charging and accounting in the international telex service

D.60	 	07-1991	Guiding principles to govern the apportionment of accounting rates in intercontinental telex relations	
D.61	 	11-1988	Charging and accounting provisions relating to the measurement of the chargeable duration of a telex call	
D.65	 	11-1988	General charging and accounting principles in the international telex service for multi-address messages via store-and-forward units	
D.67	 	03-1995	Charging and accounting in the international telex service	









D.70-D.75: Charging and accounting in the international facsimile service

D.70	 	06-1992	General tariff principles for the international public facsimile service between public bureaux (bureaufax service)	
D.71	 	06-1992	General tariff principles for the public facsimile service between subscriber stations (telefax service)	
D.73	 	06-1992	General tariff and international accounting principles for interworking between the international bureaufax and telefax services	







D.76-D.79: Charging and accounting in the international videotex service









D.79	 	07-1991	Charging and accounting principles for the international videotex service	
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D.80-D.89: Charging and accounting in the international phototelegraph service







































D.80	 	11-1988	Accounting and refunds for phototelegrams	
D.81	 	11-1988	Accounting and refunds for private phototelegraph calls	
D.83	 	11-1988	Rates for phototelegrams and private phototelegraph calls	
D.85	 	11-1988	Charging for international phototelegraph calls to multiple destinations	

D.90-D.99: Charging and accounting in the mobile services



D.90	 	03-1995	Charging, billing, international accounting and settlement in the maritime mobile service <i>The date of entry into force of this Recommendation was fixed at the 01 July 1995. Covering note, May 1999: Spanish only</i>	
D.91	 	07-1996	Transmission in encoded form of maritime telecommunications accounting information <i>TSB circular 125 (29 June 1998) and corresponding covering note detail year 2000 issues regarding the interpretation of transmitted year data.</i>	
D.91 (1996) Amendment 1	 	06-1998	Year 2000 issue and its impact on ITU-T D.91 application <i>Published as a covering note</i>	



















D.93	 	11-2003	Charging and accounting in the international land mobile telephone service (provided via cellular radio systems)	
D.94	 	01-1992	Charging, billing and accounting principles for international aeronautical mobile service, and international aeronautical mobile-satellite service	
D.95	 	10-1992	Charging, billing, accounting and refunds in the data messaging land/maritime mobile-satellite service	
D.96	 	12-1999	Charging, billing, accounting and settlement principles for Global Mobile Personal Communications by Satellite (GMPCS) for the international telephone service	
D.98		03-1993	Charging and accounting provisions relating to the transferred account telegraph and telematic services <i>Deleted after its content became technically out of date</i>	Withdrawn.

D.100-D.159: Charging and accounting in the international telephone service



D.100	 	11-1988	Charging for international calls in manual or semi-automatic operating	
D.101		11-1988	Charging in automatic international telephone service	Withdrawn.
D.103	 	06-1992	Charging in automatic service for calls terminating on a recorded announcement stating the reason for the call not being completed <i>This Recommendation is also included but not published in E series under alias number E.231</i>	
E.232	 	11-1988	Charging for calls to subscriber's station connected either to the absent subscriber's service or to a device substituting a subscriber in his absence <i>This Recommendation is also published under alias number D.104. For more details, see D.104</i>	
D.105	 	11-1988	Charging for calls from or to a public call office	
D.106	 	11-1988	Introduction of reduced rates during periods of light traffic in the international telephone service	
D.110	 	06-1992	Charging and accounting for conference calls	
D.115	 	10-1996	Tariff principles and accounting for the International Freephone Service (IFS)	
D.116	 	10-1996	Charging and accounting principles relating to the home country direct telephone service	
D.117	 	06-1999	Charging and accounting principles for the international premium rate service (IPRS)	
D.120	 	07-1996	Charging and accounting principles for the international telecommunication charge card service	
D.140	 	06-2002	Accounting rate principles for the international telephone service	
D.140 (2002) Amendment 1	 	12-2002	New Appendix to Annex C: Guidelines	
D.140 (2002) Amendment 2	 	06-2003	Revision to Annex E	
D.140 (2002) Amendment 3	 	11-2003	Revised Annex A – Guideline for the cost elements to be taken into account when determining accounting rates and accounting rate shares for the international telephone service	
D.140 Supplement 1	 	06-2002	Updated teledensities and indicative target settlement rates	
D.140 Supplement 2	 	06-2003	Updated teledensities and indicative target settlement rates (1 January 2003)	
D.150	 	06-1999	New system for accounting in international telephony	
D.151	 	11-1988	Old system for accounting in international telephony <i>A correction was introduced in a Covering note by June 1990</i>	
D.155	 	07-1996	Guiding principles governing the apportionment of accounting rates in intercontinental telephone relations	

D.160-D.179: Drawing up and exchange of international telephone and telex accounts







D.160	 	11-1988	Mode of application of the flat-rate price procedure set forth in	
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			Recommendation D.67 and Recommendation D.150 for remuneration of facilities made available to the Administrations of other countries	
D.170	 	06-1998	Monthly telephone and telex accounts	
D.171	 	11-1988	Adjustments and refunds in the international telephone service	
D.172	 	11-1988	Accounting for calls circulated over international routes for which accounting rates have not been established	
D.173	 	11-1988	Defaulting subscribers	
D.174	 	11-1988	Conventional transmission of information necessary for billing and accounting regarding collect and credit card calls	
D.176	 	12-1997	Transmission in encoded form of telephone reversed charge billing and accounting information <i>TSB circular 125 (29 June 1998) and corresponding covering note detail year 2000 issues regarding the interpretation of transmitted year data.</i>	
D.176 (1997) Amendment 1	 	06-1998	Year 2000 issue and its impact on ITU-T D.176 application <i>Published as a covering note</i>	
D.177	 	11-1988	Adjustment of charges and refunds in the international telex service	
D.178	 	03-1993	Monthly accounts for semi-automatic telephone calls (ordinary and urgent calls, with or without special facilities)	



D.180-D.184: International sound- and television-programme transmissions

D.180	 	06-2002	Occasional provision of circuits for international sound- and television-programme transmissions	
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D.185-D.189: Charging and accounting for international satellite services

D.185	 	11-1988	General tariff and accounting principles for international one-way point-to-multipoint satellite services	
D.186	 	10-1996	General tariff and accounting principles for international two-way multipoint telecommunication service via satellite	
D.188	 	10-1992	General charging and accounting principles applicable to an international videoconferencing service	







D.190-D.191: Transmission of monthly international accounting information

D.190	 	06-2002	Exchange of international traffic accounting data between Administrations using electronic data interchange (EDI) techniques	
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D.192-D.195: Service and privilege telecommunications

D.192	 	06-1992	Principles for charging and accounting of service telecommunications	
D.193	 	11-1988	Special tariff principles for privilege telecommunications	
D.195		11-1988	Settlement of international telecommunication balances of accounts	Withdrawn.
D.195	 	11-2003	Time-scale for settlement of accounts for international telecommunication services	

























D.196-D.209: Settlement of international telecommunication balances of accounts

D.196	 	06-1992	Clearing of international telecommunication balances of accounts	
D.197	 	07-1991	Notification of change of address(es) for accounting and settlement purposes	
D.201	 	12-2002	General principles regarding call-back practices	



D.210-D.279: Charging and accounting principles for international telecommunication services provided over the ISDN

D.210	 	09-1994	General charging and accounting principles for international telecommunication services provided over the Integrated Services Digital Network (ISDN)	
D.211	 	12-1998	International accounting for the use of the signal transfer point and/or	





signalling point for relay in Signalling System No. 7

D.212	 	10-1996	Charging and accounting principles for the use of Signalling System No. 7
D.220	 	03-1991	Charging and accounting principles to be applied to international circuit-mode demand bearer services provided over the integrated services digital network (ISDN)
D.224	 	12-1999	Charging and accounting principles for ATM/B-ISDN
D.225	 	12-1997	Charging and accounting principles to be applied to frame relay data transmission service
D.230	 	03-1995	General charging and accounting principles for supplementary services associated with international telecommunication services provided over the Integrated Services Digital Network (ISDN)
D.231	 	11-1988	Charging and accounting principles relating to the User-to-User Information (UUI) supplementary service
D.232	 	05-1997	Specific tariff and accounting principles applicable to ISDN supplementary services
D.233	 	07-1996	Charging and accounting principles to be applied to the reversed charge supplementary service
D.240	 	03-1991	Charging and accounting principles for teleservices supported by the ISDN
D.250	 	07-1991	General charging and accounting principles for non-voice services provided by interworking between the ISDN and existing public data networks
D.251	 	11-1988	General charging and accounting principles for the basic telephone service provided over the ISDN or by interconnection between the ISDN and the public switched telephone network
D.260	 	03-1991	Charging and accounting capabilities to be applied on the ISDN

D.280-D.284: Charging and accounting principles for universal personal telecommunication









D.280	 	03-1995	Principles for charging and billing, accounting and reimbursements for universal personal telecommunication
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D.285-D.299: Charging and accounting principles for intelligent network supported services

D.285	 	07-1996	Guiding principles for charging and accounting for intelligent network supported services
D.286	 	07-1996	Charging and accounting principles for the global virtual network service

D.300-D.699: Recommendations for regional application

D.300-D.399: Recommendations applicable in Europe and the Mediterranean Basin

D.300R	 	03-1995	Determination of accounting rate shares in telephone relations between countries in Europe and the Mediterranean Basin <i>Covering note, August 1998: Applicability of 1992 values of standard accounting rate shares components</i>
D.301R	 	03-1995	Determination of accounting rate shares and collection charges in telex relations between countries in Europe and the Mediterranean Basin <i>Covering note, August 1998: Applicability of 1984 values of standard accounting rate shares components</i>
D.302R	 	03-1995	Determination of the accounting rate shares and collection charges for the international public telegram service applicable to telegrams exchanged between countries in Europe and the Mediterranean Basin <i>Covering note, August 1998: Applicability of 1984 values of standard transition and terminal rate shares components</i>
D.303R	 	03-1995	Determination of accounting rate shares and collection charges applicable by countries in Europe and the Mediterranean Basin to the occasional provision of circuits for sound- and television-programme transmissions <i>Coverina note. Auagust 1998: Applicability of 1984 values of standard</i>

			<i>accounting rate shares components</i>	
D.305 R		11-1988	Remuneration for facilities used for the switched-transit handling of intercontinental telephone traffic in a country in Europe or the Mediterranean Basin <i>Deleted after its content became technically out of date</i>	Withdrawn.
D.306R	 	07-1991	Remuneration of public packet-switched data transmission networks between the countries of Europe and the Mediterranean Basin	
D.307R	 	03-1995	Remuneration of digital systems and channels used in telecommunication relations between the countries of Europe and the Mediterranean Basin <i>Covering note, August 1998: Applicability of 1984 values of flat-rate remuneration</i>	
D.310R	 	03-1995	Determination of rentals for the lease of international programme (sound- and television-) circuits and associated control circuits for private service in relations between countries in Europe and the Mediterranean Basin <i>Covering note, August 1998: Applicability of 1984 values of the annual rental</i>	
D.390 R		11-1988	Accounting system in the international automatic telephone service <i>Deleted after its content became technically out of date</i>	Withdrawn.
D.400-D.499: Recommendations applicable in Latin America				
D.400R	 	12-1999	Accounting rates applicable to direct traffic relations in voice telephony between countries in Latin America and the Caribbean	
D.401 R		11-1988	Accounting rates applicable to telex relations between countries in Latin America <i>Deleted following a proposal from the Tariff Group for Latin America and the Caribbean because the maximum rates indicated in this Recommendation cannot be used for negotiating accounting rates</i>	Withdrawn.
D.500-D.599: Recommendations applicable in Asia and Oceania				
D.500R	 	06-1998	Accounting rates applicable to telephone relations between countries in Asia and Oceania	
D.501R	 	10-1993	Accounting rates applicable to telex relations between countries in Asia and Oceania	
D.600-D.699: Recommendations applicable to the African Region				
D.600R	 	10-2000	Cost methodology for the regional tariff group for Africa applicable to the international automatic telephone service	
D.601R	 	10-1993	Determination of accounting rate shares and collection charges in telex relations between countries in Africa	
D.602R	 	12-2002	Application of the "sender pays transit" principle in transit relation	
D.603R	 	12-2002	Minimizing collection charges on inter-African calls	
D.606R	 	11-1988	Preferential rates in telecommunication relations between countries in Africa	
D-Series: Supplements to the Series D Recommendations				
D Suppl. 1		11-1988	Cost and tariff study method <i>available in paper format only from ITU Sales service</i>	
D Suppl. 2		11-1988	Method for carrying out a cost price study by regional tariff groups <i>available in paper format only from ITU Sales service</i>	
D.Sup3	 	03-1993	Handbook on the methodology for determining costs and establishing national tariffs	

Series E: Overall network operation, telephone service, service operation and human factors



E.100-E.229: International operation



E.100-E.103: Definitions



E.100   11-1988 Definitions of terms used in international telephone operation



E.104-E.119: General provisions concerning Administrations

E.104   02-1995 International telephone directory assistance service and public access



E.105   08-1992 International telephone service



E.106   10-2003 International Emergency Preference Scheme for disaster relief operations (IEPS)



E.109   02-1995 International billed number screening procedures for collect and third-party calling

E.110   11-1988 Organization of the international telephone network



E.111   11-1988 Extension of international telephone services



E.112   11-1988 Arrangements to be made for controlling the telephone services between two countries



E.113   05-1997 Validation procedures for the international telecommunications charge card service

E.114   11-1988 Supply of lists of subscribers (directories and other means)

E.115   02-1995 Computerized directory assistance



E.116   05-1997 International telecommunication charge card service



E.117   06-1994 Terminal devices used in connection with the public telephone service (other than telephones)



E.118   02-2001 The international telecommunication charge card



E.120-E.139: General provisions concerning users



E.120   11-1988 Instructions for users of the international telephone service



E.121   07-1996 Pictograms, symbols and icons to assist users of the telephone service



E.122   11-1988 Measures to reduce customer difficulties in the international telephone service



E.123   02-2001 Notation for national and international telephone numbers, e-mail addresses and Web addresses



E.124   11-1988 Discouragement of frivolous international calling to unassigned or vacant numbers answered by recorded announcements without charge



E.125   10-1984 Inquiries among users of the international telephone service



E.126   11-1988 Harmonization of the general information pages of the telephone directories published by Administrations



E.127   11-1988 Pages in the telephone directory intended for foreign visitors

E.128   11-1988 Leaflet to be distributed to foreign visitors



E.129   09-2002 Presentation of national numbering plans



E.130   11-1988 Choice of the most useful and desirable supplementary telephone services









E.131   11-1988 Subscriber control procedures for supplementary telephone services

E.132   11-1988 Standardization of elements of control procedures for supplementary telephone services



















E.133   11-1988 Operating procedures for cardphones

E.134   03-1993 Human factors aspects of public terminals: Generic operating procedures























E.135   10-1995 Human factors aspects of public telecommunication terminals for people with disabilities















E.136	 	05-1997	Specification of a tactile identifier for use with telecommunication cards	
E.137	 	05-1997	User instructions for payphones	
E.138	 	06-2002	Human factors aspects of public telephones to improve their usability for older people	
E.138 Erratum 1	 	02-2003		

E.140-E.159: Operation of international telephone services













E.140	 	08-1992	Operator-assisted telephone service	
E.148	 	11-1988	Routing of traffic by automatic transit exchanges	
E.149	 	11-1988	Presentation of routing data	
E.150		11-1988	Publication of a "list of international telephone routes" <i>Deleted after ITU-T decision not to publish the list due to the impossibility of updating it in the existing international environment</i>	Withdrawn.
E.151	 	08-1992	Telephone conference calls	
E.152	 	02-2001	International freephone service	
E.153	 	10-1996	Home country direct	
E.154	 	03-1998	International Shared Cost Service	
E.155	 	03-1998	International Premium Rate Service	
E.155 (1998) Amendment 1	 	02-2001		

E.160-E.169: Numbering plan of the international telephone service











E.160		03-1993	Definitions relating to national and international numbering plans <i>The content of this Recommendation is now covered by ITU-T E.164 (1997)</i>	Withdrawn.
E.161	 	02-2001	Arrangement of digits, letters and symbols on telephones and other devices that can be used for gaining access to a telephone network	
E.162		04-1995	Capability for seven digit analysis of international E.164 numbers at Time T <i>ITU-T Rec. E.162 was deleted on August 13, 2003 since the increased digit analysis from 6 to 7-digits at Time "T" that it contains has been incorporated into E.164</i>	Withdrawn.
I.331	 	05-1997	The international public telecommunication numbering plan <i>This Recommendation is published under alias number E.164</i>	
E.164 Supplement 1	 	03-1998	Alternatives for carrier selection and network identification	
E.164 Supplement 2	 	11-1998	Number Portability	
E.164 Supplement 3	 	05-2002	Operational and administrative issues associated with national implementations of the ENUM functions	
E.164 Supplement 4	 	05-2003	Operational and administrative issues associated with the implementation of ENUM for non-geographic country codes	
E.164.1	 	10-2003	Criteria and procedures for the reservation, assignment and reclamation of E.164 country codes and associated identification codes (ICs)	
E.164.2	 	02-2001	E.164 numbering resources for trials	
E.164.3	 	09-2001	Principles, criteria and procedures for the assignment and reclamation of E.164 country codes and associated identification codes for groups of countries	
E.165	 	11-1988	Timetable for coordinated implementation of the full capability of the numbering plan for the ISDN era (Recommendation E.164) <i>This Recommendation is also published under alias number Q.11 ter</i>	
E.165.1	 	10-1996	Use of escape code "0" within the E.164 numbering plan during the transition period to implementation of NPI mechanism	
E.166/X.122	 	03-1998	Numbering plan interworking for the E.164 and X.121 numbering	

			plans <i>This Recommendation is published with the double number E.166 and X.122</i>	
E.167	 	11-1988	ISDN Network Identification Codes	
E.168	 	05-2002	Application of E.164 numbering plan for UPT	
E.168.1	 	05-2002	Assignment procedures for universal personal telecommunications (UPT) numbers in the provisioning of the international UPT service	
E.169	 	05-2002	Application of Recommendation E.164 numbering plan for universal international numbers for international telecommunications services using country codes for global services	
E.169.1	 	09-2001	Application of Recommendation E.164 numbering plan for universal international freephone numbers for international freephone service <i>This version is a revision of former Rec. E.169 (11/1998)</i>	
E.169.2	 	10-2000	Application of Recommendation E.164 numbering plan for universal international premium rate numbers for the international premium rate service	
E.169.3	 	10-2000	Application of Recommendation E.164 numbering plan for universal international shared cost numbers for international shared cost service	













E.170-E.179: International routing plan

E.170	 	10-1992	Traffic routing	
E.171/Q.13		11-1988	International telephone routing plan	Withdrawn.
E.172	 	10-1992	ISDN routing plan <i>Replaces ITU-T I.335 (1988).</i>	
E.173	 	08-1991	Routing plan for interconnection between public land mobile networks and fixed terminal networks	
E.174	 	04-1995	Routing principles and guidance for Universal Personal Telecommunications (UPT)	
E.175	 	11-1988	Models for international network planning	
E.177	 	10-1996	B-ISDN routing	

E.180-E.189: Tones in national signalling systems

















E.180/Q.35	 	03-1998	Technical characteristics of tones for the telephone service <i>This Recommendation is published with the double number E.180 and Q.35</i>	
E.181	 	11-1988	Customer recognition of foreign tones	
E.182	 	03-1998	Application of tones and recorded announcements in telephone services	
E.183	 	03-1998	Guiding principles for telephone announcements	
E.184	 	11-1988	Indications to users of ISDN terminals	

E.190-E.199: Numbering plan of the international telephone service

E.190	 	05-1997	Principles and responsibilities for the management, assignment and reclamation of E-series international numbering resources	
E.191	 	03-2000	B-ISDN addressing	
E.191 (2000) Corrigendum 1	 	02-2002		
E.191.1	 	02-2001	Criteria and procedures for the allocation of ITU-T International Network Designator addresses	
E.193	 	03-2000	E.164 country code expansion	
E.195	 	10-2000	ITU-T International numbering resource administration	







E.200-E.229: Maritime mobile service and public land mobile service

E.201		08-1991	Reference recommendation for mobile services	Withdrawn.
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			<i>This Recommendation was deleted since it has not been updated since 1991</i>	
E.202	 	10-1992	Network operational principles for future public mobile systems and services	
F.120	 	11-1988	Ship station identification for VHF/UHF and maritime mobile-satellite services <i>This Recommendation is also published under alias number E.210</i>	
E.211		11-1988	Selection procedures for VHF/UHF maritime mobile services <i>Former E.211/Q.11 quater (1984). Deleted because E.211 has no service function</i>	Withdrawn.
E.212	 	11-1998	The international identification plan for mobile terminals and mobile users	
E.212 (1998) Amendment 1	 	05-2003	New Annex A: Criteria and procedures for the assignment and reclamation of shared E.212 mobile country codes (MCC) and their respective mobile network codes (MNCs)	
E.213	 	11-1988	Telephone and ISDN numbering plan for land mobile stations in public land mobile networks (PLMN)	
E.214	 	11-1988	Structure of the land mobile global title for the signalling connection control part (SCCP)	
E.216		03-1993	Selection procedures for the INMARSAT mobile-satellite telephone and ISDN services <i>Only the previous edition (1988) of ITU-T E.216 was published. 1993 edition was never published and the out of date Recommendation was definitively suppressed in 1996</i>	Withdrawn.
E.217	 	05-2002	Maritime communications – Ship station identity	
E.220	 	02-1996	Interconnection of public land mobile networks (PLMN)	

E.230-E.299: Operational provisions relating to charging and accounting in the international telephone service

E.230-E.249: Charging in the international telephone service





E.230	 	08-1992	Chargeable duration of calls	
D.103	 	06-1992	Charging in automatic service for calls terminating on a recorded announcement stating the reason for the call not being completed <i>This Recommendation is also included but not published in E series under alias number E.231</i>	
E.232	 	11-1988	Charging for calls to subscriber's station connected either to the absent subscriber's service or to a device substituting a subscriber in his absence <i>This Recommendation is also published under alias number D.104. For more details, see D.104</i>	

E.260-E.269: Measuring and recording call durations for accounting purposes





E.260	 	11-1988	Basic technical problems concerning the measurement and recording of call durations	
E.261	 	11-1988	Devices for measuring and recording call durations	
D.170	 	06-1998	Monthly telephone and telex accounts	

E.300-E.329: Utilization of the international telephone network for non-telephony applications







E.300-E.319: General

E.300	 	11-1988	Special uses of circuits normally employed for automatic telephone traffic	
E.301	 	03-1993	Impact of non-voice applications on the telephone network	



























E.320-E.329: Phototelegraphy

E.320	 	11-1988	Speeding up the establishment and clearing of phototelegraph calls
F.107	 	11-1988	Rules for phototelegraph calls established over circuits normally used for telephone traffic <i>Published as F.82 (11/88), then renumbered as F.107. This Recommendation is also included but not published in E series under alias number E.323.</i>

E.330-E.349: ISDN provisions concerning users



E.330	 	11-1988	User control of ISDN-supported services
E.331	 	10-1991	Minimum user-terminal interface for a human user entering address information into an ISDN terminal
Z.323	 	11-1988	Man-machine interaction <i>This Recommendation is also included but not published in E series under alias number E.333.</i>

E.350-E.399: International routing plan











E.350	 	03-2000	Dynamic routing interworking
E.351	 	03-2000	Routing of multimedia connections across TDM-, ATM- and IP-based networks
E.352	 	03-2000	Routing guidelines for efficient routing methods
E.353	 	02-2001	Routing of calls when using international network routing addresses
E.360.1	 	05-2002	Framework for QoS routing and related traffic engineering methods for IP-, ATM-, and TDM-based multiservice networks
E.360.2	 	05-2002	QoS routing and related traffic engineering methods – Call routing and connection routing methods
E.360.3	 	05-2002	QoS routing and related traffic engineering methods – QoS resource management methods
E.360.4	 	05-2002	QoS routing and related traffic engineering methods – Routing table management methods and requirements
E.360.5	 	05-2002	QoS routing and related traffic engineering methods – Transport routing methods
E.360.6	 	05-2002	QoS routing and related traffic engineering methods – Capacity management methods
E.360.7	 	05-2002	QoS routing and related traffic engineering methods – Traffic engineering operational requirements
E.361	 	05-2003	QoS routing support for interworking of QoS service classes across routing technologies
E.370	 	02-2001	Service principles when public circuit-switched international telecommunication networks interwork with IP-based networks











E.400-E.489: Network management

E.400-E.409: International service statistics



























































E.401	 	11-1988	Statistics for the international telephone service (number of circuits in operation and volume of traffic)
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E.410-E.419: International network management

E.410	 	03-1998	International network management – General information
E.411	 	03-2000	International network management – Operational guidance
E.411 (2000) Amendment 1	 	03-2001	
E.412	 	01-2003	Network management controls
E.413	 	11-1988	International network management – Planning























E.414	 	11-1988	International network management – Organization
E.415	 	08-1991	International network management guidance for common channel signalling system No. 7
E.416	 	03-2000	Network management principles and functions for B-ISDN traffic
E.417	 	02-2001	Framework for the network management of IP-based networks
E.418	 	05-2003	Framework for network management of IMT-2000 networks

E.420-E.489: Checking the quality of the international telephone service







E.420	 	11-1988	Checking the quality of the international telephone service – General considerations
E.421	 	11-1988	Service quality observations on a statistical basis
E.422	 	02-1996	Observations on international outgoing telephone calls for quality of service
E.423	 	11-1988	Observations on traffic set up by operators
E.424	 	10-1992	Test calls
E.425	 	03-2002	Internal automatic observations
E.426	 	10-1992	General guide to the percentage of effective attempts which should be observed for international telephone calls
E.427	 	11-1988	Collection and statistical analysis of special quality of service observation data for measurements of customer difficulties in the international automatic service
E.428	 	10-1992	Connection retention
E.430	 	06-1992	Quality of service framework
E.431	 	06-1992	Service quality assessment for connection set-up and release delays
E.432	 	06-1992	Connection quality
E.433	 	06-1992	Billing integrity
E.434	 	06-1992	Subscriber-to-subscriber measurement of the public switched telephone network
E.436	 	03-1998	Customer Affecting Incidents and blocking Defects Per Million
E.437	 	05-1999	Comparative metrics for network performance management
E.438	 	03-2000	Performance parameters and measurement methods to assess N-ISDN 64 kbit/s circuit-switched bearer service UDI in operation
E.439	 	03-2000	Test call measurement to assess N-ISDN 64 kbit/s circuit-switched bearer service UDI in operation
E.440	 	02-1996	Customer satisfaction point
E.450	 	03-1998	Facsimile quality of service on public networks – General aspects
E.451	 	02-2001	Facsimile call cut-off performance
E.452	 	03-1993	Facsimile modem speed reductions and transaction time
E.453	 	08-1994	Facsimile image quality as corrupted by transmission-induced scan line errors
E.454	 	10-1996	Transmission performance metrics based on Error Correction Mode (ECM) facsimile
E.456	 	03-1998	Test transaction for facsimile transmission performance
E.457	 	02-1996	Facsimile measurement methodologies
E.458	 	02-1996	Figure of merit for facsimile transmission performance
E.459	 	03-1998	Measurements and metrics for characterizing facsimile transmission performance using non-intrusive techniques
E.460	 	03-2000	Measurements and metrics for monitoring the performance of V.34 Group 3 Facsimile

E.490-E.799: Traffic engineering



E.490-E.505: Measurement and recording of traffic

E.490	 	06-1992	Traffic measurement and evaluation – General survey
E.490.1	 	01-2003	Overview of Recommendations on traffic engineering
E.491	 	05-1997	Traffic measurement by destination
E.492	 	02-1996	Traffic reference period
E.493	 	02-1996	Grade of service (GOS) monitoring
E.500	 	11-1998	Traffic intensity measurement principles
E.501	 	05-1997	Estimation of traffic offered in the network
E.502	 	02-2001	Traffic measurement requirements for digital telecommunication exchanges
E.503	 	06-1992	Traffic measurement data analysis
E.504	 	11-1988	Traffic measurement administration
E.505	 	06-1992	Measurements of the performance of common channel signalling network





















E.506-E.509: Forecasting of traffic

E.506	 	06-1992	Forecasting international traffic
E.507	 	11-1988	Models for forecasting international traffic
E.508	 	10-1992	Forecasting new telecommunication services









E.510-E.519: Determination of the number of circuits in manual operation

E.510	 	11-1988	Determination of the number of circuits in manual operation <i>This Recommendation was deleted since it has not been updated since 1988 and is no longer of interest</i> Withdrawn.
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E.520-E.539: Determination of the number of circuits in automatic and semi-automatic operation

E.520	 	11-1988	Number of circuits to be provided in automatic and/or semiautomatic operation, without overflow facilities
E.521	 	11-1988	Calculation of the number of circuits in a group carrying overflow traffic
E.522	 	11-1988	Number of circuits in a high-usage group
E.523	 	11-1988	Standard traffic profiles for international traffic streams
E.524	 	05-1999	Overflow approximations for non-random inputs
E.525	 	06-1992	Designing networks to control grade of service
E.526	 	03-1993	Dimensioning a circuit group with multi-slot bearer services and no overflow inputs
E.527	 	03-2000	Dimensioning at a circuit group with multi-slot bearer services and overflow traffic
E.528	 	02-1996	Dimensioning of digital circuit multiplication equipment (DCME) systems
E.529	 	05-1997	Network dimensioning using end-to-end GOS objectives







E.540-E.599: Grade of service

E.540	 	11-1988	Overall grade of service of the international part of an international connection
E.541	 	11-1988	Overall grade of service for international connections (subscriber-to-subscriber)
E.543	 	11-1988	Grades of service in digital international telephone exchanges
E.550	 	03-1993	Grade-of-service and new performance criteria under failure conditions in international telephone exchanges











































E.600-E.649: Definitions

E.600	 	03-1993	Terms and definitions of traffic engineering	
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E.650-E.699: Traffic engineering for IP-networks











E.651	 	03-2000	Reference connections for traffic engineering of IP access networks	
E.671	 	03-2000	Post-selection delay in PSTN/ISDN networks using Internet telephony for a portion of the connection	
E.681	 	10-2001	Traffic engineering methods for IP access networks based on hybrid fiber/coax system	

E.700-E.749: ISDN traffic engineering

E.700	 	10-1992	Framework of the E.700-Series Recommendations	
E.701	 	10-1992	Reference connections for traffic engineering	
E.710		10-1992	ISDN traffic modelling overview <i>Deleted after its content became technically out of date</i>	Withdrawn.
E.711	 	10-1992	User demand modelling	
E.712	 	10-1992	User plane traffic modelling	
E.713	 	10-1992	Control plane traffic modelling <i>Only the title changes</i>	
E.716	 	10-1996	User demand modelling in Broadband-ISDN	
E.720	 	11-1988	ISDN grade of service concept	
E.721	 	05-1999	Network grade of service parameters and target values for circuit-switched services in the evolving ISDN	
E.723	 	06-1992	Grade-of-service parameters for Signalling System No. 7 networks	
E.724	 	02-1996	GOS parameters and target GOS objectives for IN services	
E.726	 	03-2000	Network grade of service parameters and target values for B-ISDN	
E.728	 	03-1998	Grade-of-service parameters for B-ISDN signalling	
E.730		10-1992	ISDN dimensioning methods overview <i>Deleted after its content became technically out of date</i>	Withdrawn.
E.731	 	10-1992	Methods for dimensioning resources operating in circuit-switched mode	
E.733	 	11-1998	Methods for dimensioning resources in Signalling System No. 7 networks	
E.734	 	10-1996	Methods for allocating and dimensioning Intelligent Network (IN) resources	
E.735	 	05-1997	Framework for traffic control and dimensioning in B-ISDN	
E.736	 	03-2000	Methods for cell level traffic control in B-ISDN	
E.737	 	02-2001	Dimensioning methods for B-ISDN	
E.743	 	04-1995	Traffic measurements for SS No. 7 dimensioning and planning	
E.744	 	10-1996	Traffic and congestion control requirements for SS No. 7 and IN-structured networks	
E.745	 	03-2000	Cell level measurement requirements for the B-ISDN	





E.750-E.799: Mobile network traffic engineering

E.750	 	03-2000	Introduction to the E.750 series of Recommendations on traffic engineering aspects of networks supporting personal communications services	
E.751	 	02-1996	Reference connections for traffic engineering of land mobile networks	
E.752	 	10-1996	Reference connections for traffic engineering of maritime and aeronautical systems	
E.755	 	02-1996	Reference connections for UPT traffic performance and GOS	
E.760	 	03-2000	Terminal mobility traffic modelling	
E.770	 	03-1993	Land mobile and fixed network interconnection traffic grade of service concept	







E.771	 	10-1996	Network grade of service parameters and target values for circuit-switched public land mobile services
E.773	 	10-1996	Maritime and aeronautical mobile grade of service concept
E.774	 	10-1996	Network grade of service parameters and target values for maritime and aeronautical mobile services
E.775	 	02-1996	UPT grade of service concept
E.776	 	10-1996	Network grade of service parameters for UPT

E.800-E.899: Quality of telecommunication services: concepts, models, objectives and dependability planning









E.800-E.809: Terms and definitions related to the quality of telecommunication services

E.800	 	08-1994	Terms and definitions related to quality of service and network performance including dependability
E.801	 	10-1996	Framework for Service Quality Agreement





E.810-E.844: Models for telecommunication services

E.810	 	10-1992	Framework of the Recommendations on the serveability performance and service integrity for telecommunication services
E.820	 	10-1992	Call models for serveability and service integrity performance
E.830	 	10-1992	Models for the specification, evaluation and allocation of serveability and service integrity



E.845-E.859: Objectives for quality of service and related concepts of telecommunication services

E.845	 	11-1988	Connection accessibility objective for the international telephone service
E.846	 	03-1993	Accessibility for 64 kbit/s circuit-switched international end-to-end ISDN connection types
E.850	 	10-1992	Connection retainability objective for the international telephone service
E.855	 	11-1988	Connection integrity objective for the international telephone service

E.860-E.879: Use of quality of service objectives for planning of telecommunication networks









E.860	 	06-2002	Framework of a service level agreement
E.862	 	06-1992	Dependability planning of telecommunication networks

E.880-E.899: Field data collection and evaluation on the performance of equipment, networks and services





E.880	 	11-1988	Field data collection and evaluation on the performance of equipment, networks and services
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E-Series: Supplements to the Series E Recommendations









E-Series: Supplements to the Series E Recommendations relating to the operations of the international service

E.300 Series Supplement 1	 	11-1988	List of possible supplementary telephone services which may be offered to subscribers
E.300 Series Supplement 3	 	11-1988	North american precise audible tone plan
E.300 Series Supplement 4	 	11-1988	Treatment of calls considered as terminating abnormally
E.300 Series Supplement 5	 	10-1984	Modelling of an experimental test design for the determination of inexperienced user difficulties in setting up international calls using nationally available instructions, or to compare different sets of

instructions

E.300 Series Supplement 6	 	11-1988	Preparation of information to customers travelling abroad	
E.300 Series Supplement 7	 	11-1988	Description of INMARSAT existing and planned systems	























E-Series: Supplements to the Series E Recommendations relating to telephone network management and traffic engineering

E.800 Series Supplement 1	 	11-1988	Table of the Erlang formula	
E.800 Series Supplement 2	 	11-1988	Curves showing the relation between the traffic offered and the number of circuits required	
E.800 Series Supplement 5	 	11-1988	Teletraffic implications for international switching and operational procedures resulting from a failure of a transmission facility	
E.800 Series Supplement 7	 	11-1988	Guide for evaluating and implementing alternate routing networks	









Series F: Non-telephone telecommunication services

F.1-F.109: Telegraph service









F.1-F.19: Operating methods for the international public telegram service

F.1	 	03-1998	Operational provisions for the international public telegram service	
F.2	 	11-1988	Operational provisions for the collection of telegram charges <i>Published as F.42 (11/88), then renumbered as F.2</i>	
F.4	 	11-1988	Plain and secret language	
F.10	 	11-1988	Character error rate objective for telegraph communication using 5-unit start-stop equipment	
F.11	 	10-1991	Continued availability of traditional services	
F.13		11-1988	Operational provisions for participation in the transferred account telegraph and telematic service <i>Published as F.41 (11/88), then renumbered as F.13. It was deleted after the withdrawal of the transferred account telegraph and telematic service</i>	Withdrawn.
F.14	 	08-1992	General provisions for one-stop-shopping arrangements	
F.15	 	08-1992	Evaluating the success of new services	
F.16	 	02-1995	Global virtual network service	
F.17	 	08-1992	Operational aspects of service telecommunications	
F.18	 	03-1998	Guidelines on harmonization of international public bureau services	
F.19	 	01-1996	Collection and dissemination of official service information	





F.20-F.29: The gentex network

F.20	 	11-1988	The international gentex service	
F.21	 	11-1988	Composition of answer-back codes for the international gentex service	
F.23	 	11-1988	Grade of service for long-distance international gentex circuits	
F.24	 	11-1988	Average grade of service from country to country in the gentex service	









F.30-F.39: Message switching

































F.30	 	03-1993	Use of various sequences of combinations for special purposes	
F.31	 	11-1988	Telegram retransmission system	
F.32	 	10-1995	Telegram destination indicators <i>Formerly Rec. F.96.</i>	
F.35	 	11-1988	Provisions applying to the operation of an international public automatic message switching service for equipments utilizing the International Telegraph Alphabet No. 2	

F.40-F.58: The international telemessage service

F.40	 	03-1991	International public telemessage service <i>Formerly Rec. F.50.</i>	
F.41	 	03-1991	Interworking between the telemessage service and the international public telegram service <i>Formerly Rec. F.51.</i>	

F.59-F.89: The international telex service





F.59	 	10-1996	General characteristics of the international telex service	
F.60	 	08-1992	Operational provisions for the international telex service	
F.61	 	11-1988	Operational provisions relating to the chargeable duration of a telex call	
F.63	 	03-1993	Additional facilities in the international telex service	

F.64	 	11-1988	Determination of the number of international telex circuits required to carry a given volume of traffic	
F.65	 	11-1988	Time-to-answer by operators at international telex positions	
F.68	 	11-1988	Establishment of the automatic intercontinental telex network	
F.69	 	06-1994	The international telex service – Service and operational provisions of telex destination codes and telex network identification codes	
F.70	 	11-1988	Evaluating the quality of the international telex service	
F.71	 	11-1988	Interconnection of private teleprinter networks with the telex network	
F.72	 	10-1996	The international telex service – General principles and operational aspects of a store and forward facility	
F.74	 	08-1992	Intermediate storage devices accessed from the international telex service using single stage selection – Answerback format	
F.80	 	10-1991	Basic requirements for interworking relations between the international telex service and other services	
F.82	 	10-1991	Operational provisions to permit interworking between the international telex service and the intex service	
F.83	 	07-1990	Operational principles for communication between terminals of the international telex service and data terminal equipment on packet-switched public data networks <i>Published as F.73, then renumbered as F.83. A Corrigendum was indicated in 12/1990.</i>	
F.421	 	11-1988	Message handling services: Intercommunication between the IPM service and the telex service <i>This Recommendation is also included but not published in F series under alias number F.85. Covering note, December 1999: Intercommunication between the IPM service and the telex service.</i>	
F.421 Errata	 	12-1999		
F.86	 	10-1991	Interworking between the international telex service and the videotex service	
F.87	 	03-1991	Operational principles for the transfer of messages from terminals on the telex network to Group 3 facsimile terminals connected to the public switched telephone network <i>Drafted as F.76, then renumbered and published as F.87.</i>	
F.89	 	08-1992	Status enquiry function in the international telex service	





F.90-F.99: Statistics and publications on international telegraph services



F.91		11-1988	General statistics for the telegraph services <i>Deleted as a consequence of the abolition of a number of service documents</i>	Withdrawn.
F.92		11-1988	Service codes <i>The content of this Recommendation is now covered by ITU-T F.32</i>	Withdrawn.
F.93		11-1988	Routing table for offices connected to the gentex service <i>Deleted as a consequence of the abolition of a number of service documents</i>	Withdrawn.
F.95		11-1988	Table of international telex relations and traffic <i>Deleted as a consequence of the abolition of a number of service documents</i>	Withdrawn.



F.100-F.104: Scheduled and leased communication services

F.100	 	11-1988	Scheduled radiocommunication service	
F.104	 	10-1991	International leased circuit services – Customer circuit designations	

F.105-F.109: Phototelegraph service





























F.105	 	11-1988	Operational provisions for phototelegrams <i>Published as F.80 (11/88), then renumbered as F.105.</i>	
F.106	 	11-1988	Operational provisions for private phototelegraph calls <i>Published as F.80 bis (11/88), then renumbered as F.106.</i>	

F.107	 	11-1988	Rules for phototelegraph calls established over circuits normally used for telephone traffic <i>Published as F.82 (11/88), then renumbered as F.107. This Recommendation is also included but not published in E series under alias number E.323.</i>
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F.108	 	11-1988	Operating rules for international phototelegraph calls to multiple destinations <i>Published as F.85 (11/88), then renumbered as F.108.</i>
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F.110-F.159: Mobile service







F.110-F.159: Mobile services and multdestination satellite services

F.110	 	07-1996	Operational provisions for the maritime mobile service <i>The date of entry into effect of this Recommendation edition is 1 January 1997.</i>
F.111	 	03-1991	Principles of service for mobile systems
F.112	 	11-1988	Quality objectives for 50-baud start-stop telegraph transmission in the maritime mobile-satellite service
F.113	 	08-1992	Service provisions for aeronautical passenger communications supported by mobile-satellite systems
F.115	 	02-1995	Service objectives and principles for future public land mobile telecommunication systems
F.116	 	03-2000	Service features and operational provisions in IMT-2000
F.120	 	11-1988	Ship station identification for VHF/UHF and maritime mobile-satellite services <i>This Recommendation is also published under alias number E.210</i>
F.122	 	11-1988	Operational procedures for the maritime satellite data transmission service
F.127	 	10-1996	Operational procedures for interworking between the international telex service and the service offered by the INMARSAT-C system
F.130	 	11-1988	Maritime answer-back codes
F.131	 	11-1988	Radiotelex service codes
F.140	 	03-1993	Point-to-multipoint telecommunication service via satellite
F.141	 	06-1994	International two-way multipoint telecommunication service via satellite
F.150	 	10-1991	Service and operational provisions for the Intex service

F.160-F.399: Telematic services

F.160-F.199: Public facsimile service





F.160		03-1993	General operational provisions for the international public facsimile services <i>Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services</i>	Withdrawn.
F.162	 	07-1996	Service and operational requirements of store-and-forward facsimile service	
F.163	 	07-1996	Operational requirements of the interconnection of facsimile store-and-forward units	
F.166		07-1996	Service and operational requirements for a fax database service (FaxDB) <i>Deleted as there are no plans for the introduction of a service of this nature</i>	Withdrawn.
F.170	 	03-1998	Operational provisions for the international public facsimile service between public bureaux (Bureaufax)	
F.171	 	11-1988	Operational provisions relating to the use of store-and-forward switching nodes within the bureaufax service	

F.180			10-1996	General operational provisions for the international public facsimile service between subscribers' terminals (Telefax) <i>Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services</i>	Withdrawn.
F.182			10-1996	Operational provisions for the international public facsimile service between subscribers with Group 3 facsimile terminals (Telefax 3) <i>Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services</i>	Withdrawn.
F.182bis			10-1996	Guidelines for the support of the communication of documents using Group 3 facsimile between user terminals via public networks	
F.184			07-1996	Operational provisions for the international public facsimile service between subscriber stations with group 4 facsimile terminals (Telefax 4) <i>Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services</i>	Withdrawn.
F.185			06-1998	Internet facsimile: Guidelines for the support of the communication of facsimile documents	
F.190			08-1992	Operational provisions for the international facsimile service between public bureaux and subscriber stations and vice versa (bureaufax-telefax and vice versa)	







F.200-F.299: Teletex service

F.200			08-1992	Teletex service <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
F.201			03-1993	Interworking between teletex service and telex service – General principles <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
F.202			11-1988	Interworking between the telex service and the teletex service – General procedures and operational requirements for the international interconnection of telex/teletex conversion facilities <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
F.203			11-1988	Network based storage for the teletex service <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
F.220			03-1993	Service requirements unique to the processable mode number eleven (PM11) used within the teletex service <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
F.230			11-1988	Service requirements unique to the mixed mode (MM) used within the teletex service <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.





F.300-F.349: Videotex service














F.300			03-1993	Videotex service	
F.301			10-1995	Fast speed PSTN videotex	

F.350-F.399: General provisions for telematic services







F.350			11-1988	Application of Series T Recommendations	
F.351			11-1988	General principles on the presentation of terminal identification to users of the telematic services	
F.353			11-1988	Provision of telematic and data transmission services on integrated services digital network (ISDN)	

F.400-F.499: Message handling services

F.400/X.400			06-1999	Message handling services: Message handling system and service overview	Pre-published.
F.401			08-1992	Message handling services: Naming and addressing for public message handling services	

F.410	 	08-1992	Message handling services: The public message transfer service	
F.415	 	11-1988	Message handling services: Intercommunication with public physical delivery services <i>Erratum in F.410 (08/92)</i>	
F.420	 	08-1992	Message handling services: The public interpersonal messaging service	
F.421	 	11-1988	Message handling services: Intercommunication between the IPM service and the telex service <i>This Recommendation is also included but not published in F series under alias number F.85. Covering note, December 1999: Intercommunication between the IPM service and the telex service.</i>	
F.421 Errata	 	12-1999		
F.422		11-1988	Message handling services: Intercommunication between the IPM service and the teletex service <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
F.423	 	08-1992	Message handling services: Intercommunication between the interpersonal messaging service and the telefax service	
F.435	 	06-1999	Message handling services: Electronic Data Interchange messaging service	
F.440	 	08-1992	Message handling services: The voice messaging service	
F.471	 	08-1997	Operational requirements for the interconnection of voice-mail store-and-forward units	
F.471 (1997) Corrigendum 1	 	09-1998		
F.472	 	08-1997	Service and operational requirements of the voice-mail store-and-forward service	

F.500-F.549: Directory services



F.500	 	08-1992	International public directory services	
F.510	 	02-2003	Automated directory assistance – White pages service definition	
F.515	 	04-2003	Unified Directory specification	

F.550-F.599: Document communication



F.550-F.579: Document communication

F.551		03-1993	Service Recommendation for the telematic file transfer within Telefax 3, Telefax 4, Teletex services and message handling services <i>This Recommendation is no longer needed since the characteristics of the file transfer capabilities are fully described in ITU-T T.434 (BFT)</i>	Withdrawn.
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F.580-F.599: Programming communication interfaces



















F.581	 	03-1993	Guidelines for programming communication interfaces (PCIs) definition: Service Recommendation	
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F.600-F.699: Data transmission services







F.600	 	04-2004	Service and operational principles for public data transmission service	Pre-published.
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F.700-F.799: Audiovisual services









F.700	 	11-2000	Framework Recommendation for multimedia services	
F.701		11-1988	Teleconference service <i>This Recommendation was published as F.710 (11/88), then renumbered as F.701. Its content is superseded by ITU-T F.702 on multimedia</i>	Withdrawn.
F.701	 	11-2000	Guideline Recommendation for identifying multimedia service requirements	

F.702	 	07-1996	Multimedia conference services	
F.703	 	11-2000	Multimedia conversational services	
F.710		03-1991	General principles for audiographic conference service <i>The content of this Recommendation is superseded by ITU-T F.702 on multimedia</i>	Withdrawn.
F.711		08-1993	Audiographic conference teleservice for ISDN <i>The content of this Recommendation is superseded by ITU-T F.731 on multimedia</i>	Withdrawn.
F.720	 	08-1992	Videotelephony services – General	
F.721	 	08-1992	Videotelephony teleservice for ISDN	
F.723	 	07-1996	Videophone service in the Public Switched Telephone Network (PSTN)	
F.730		08-1992	Videoconference service – General <i>The content of this Recommendation is superseded by ITU-T F.702 on multimedia</i>	Withdrawn.
F.731	 	07-1997	Multimedia Conference Services in the ISDN	
F.732	 	10-1996	Multimedia conference services in the B-ISDN	
F.740	 	08-1993	Audiovisual interactive services	
F.761	 	11-1988	Service-oriented requirements for telewriting applications <i>Published as F.730 (11/88), then renumbered as F.761.</i>	







F.800-F.849: ISDN services

F.811	 	07-1996	Broadband connection-oriented bearer service	
F.812	 	08-1992	Broadband connectionless data bearer service	
F.813	 	02-1995	Virtual path service for reserved and permanent communications	





F.850-F.899: Universal personal telecommunication

F.850	 	03-1993	Principles of Universal Personal Telecommunication (UPT)	
F.851	 	02-1995	Universal Personal Telecommunication (UPT) – Service description (service set 1)	
F.852	 	03-2000	Universal Personal Telecommunication (UPT) – Service description (service set 2)	
F.853	 	11-1998	Supplementary services in the Universal Personal Telecommunication (UPT) environment	

F.900-F.999: Human factors

F.901	 	03-1993	Usability evaluation of telecommunication services	
F.902	 	02-1995	Interactive services design guidelines	
F.910	 	02-1995	Procedures for designing, evaluating and selecting symbols, pictograms and icons	





























F-Series: Supplements to the Series F Recommendations

F.Sup1	 	11-1988	Definitions relating to telegraph, telematic and data transmission services	
F.Sup2	 	11-1988	Terms and definitions for telex	

















Series G: Transmission systems and media, digital systems and networks

G.100-G.199: International telephone connections and circuits









G.100-G.109: General definitions

G.100	 	02-2001	Definitions used in Recommendations on general characteristics of international telephone connections and circuits	
G.100.1	 	11-2001	The use of the decibel and of relative levels in speechband telecommunications	
G.101	 	11-2003	The transmission plan	
G.102	 	11-1988	Transmission performance objectives and Recommendations	
G.103	 	12-1998	Hypothetical reference connections	
G.105	 	11-1988	Hypothetical reference connection for crosstalk studies	
G.107	 	03-2003	The E-model, a computational model for use in transmission planning	
G.108	 	09-1999	Application of the E-model: A planning guide <i>Covering note, November 2000: Erratum</i>	
G.108 Erratum 1	 	12-2000		
G.108 (1999) Amendment 1	 	09-2003	New Appendix I – The relationship between and interaction of talker echo and absolute delay	
G.108 (1999) Amendment 2	 	03-2004	New Appendix II – Planning examples regarding delay in packet-based networks	Pre-published.
G.108.1	 	05-2000	Guidance for assessing conversational speech transmission quality effects not covered by the E-model	
G.108.2	 	01-2003	Transmission planning aspects of echo cancellers	
G.109	 	09-1999	Definition of categories of speech transmission quality	







G.110-G.119: General Recommendations on the transmission quality for an entire international telephone connection

G.111	 	03-1993	Loudness ratings (LRs) in an international connection	
G.113	 	02-2001	Transmission impairments due to speech processing <i>Appendix I in G.113 was revised by 10/2001 version</i>	
G.113 Appendix I	 	05-2002	Provisional planning values for the equipment impairment factor I _e and packet-loss robustness factor B _{pl}	
G.114	 	05-2003	One-way transmission time	
G.114 (2003) Amendment 1	 	09-2003	New Appendix II: Guidance on one-way delay for Voice over IP <i>The text introduced by this amendment was directly included in G.114 (05/2003)</i>	Pre-published.
G.115	 	02-1996	Mean active speech level for announcement and speech synthesis systems	
G.116	 	09-1999	Transmission performance objectives applicable to end-to-end international connections	
G.117	 	02-1996	Transmission aspects of unbalance about earth	



G.120-G.129: General characteristics of national systems forming part of international connections

G.120	 	12-1998	Transmission characteristics of national networks	
G.121	 	03-1993	Loudness ratings (LRs) of national systems	
G.122	 	03-1993	Influence of national systems on stability and talker echo in international connections	
G.123		11-1988	<i>Circuit noise in national networks</i> <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.125		11-1988	<i>Characteristics of national circuits on carrier systems</i> <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.126	 	03-1993	Listener echo in telephone networks	

G.130-G.139: General characteristics of the 4-wire chain formed by the international circuits and national extension circuits

G.131	 	11-2003	Talker echo and its control	
G.132		11-1988	Attenuation distortion <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.133		11-1988	Group-delay distortion <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.134		11-1988	Linear crosstalk <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.135		11-1988	Error on the reconstituted frequency <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.136	 	09-1999	Application rules for Automatic Level Control Devices <i>Covering note, May 2000: Erratum</i>	
G.136 Erratum 1	 	12-2000		











G.140-G.149: General characteristics of the 4-wire chain of international circuits; international transit

G.141		11-1988	Attenuation distortion <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.142	 	12-1998	Transmission characteristics of exchanges	
G.143		11-1988	Circuit noise and the use of compandors <i>Deleted because it deals with compandor transmission aspects, which use is no more recommended in networks</i>	Withdrawn.













G.150-G.159: General characteristics of international telephone circuits and national extension circuits

G.151		11-1988	General performance objectives applicable to all modern international circuits and national extension circuits <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.152		11-1988	Characteristics appropriate to long-distance circuits of a length not exceeding 2500 km <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.
G.153		11-1988	Characteristics appropriate to international circuits more than 2500 km in length <i>The content of this Recommendation is now covered by ITU-T G.120</i>	Withdrawn.





G.160-G.169: Apparatus associated with long-distance telephone circuits

G.161		10-1976	Echo-suppressors suitable for circuits having either short or long propagation times <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.161	 	06-2002	Interaction aspects of signal processing network equipment	
G.162		11-1988	Characteristics of compandors for telephony <i>Deleted because it deals with compandor transmission aspects, which use is no more recommended in networks</i>	Withdrawn.
G.163		11-1988	Call concentrating systems <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.164	 	11-1988	Echo suppressors	
G.165	 	03-1993	Echo cancellers	
G.166		11-1988	Characteristics of syllabic compandors for telephony on high capacity long distance systems <i>Deleted because it deals with compandor transmission aspects, which use is no more recommended in networks</i>	Withdrawn.
G.167		03-1993	Acoustic echo controllers <i>Withdrawn on 14 Feb. 2004, its content being now covered by ITU-T Rec. P.340 (2000) (clauses 1-5 of G.167) and G.161 (2002) (section 6 of G.167)</i>	Withdrawn.
G.168	 	06-2002	Digital network echo cancellers	
G.169	 	07-1999	Automatic level control devices	





G.170-G.179: Transmission plan aspects of special circuits and connections using the international telephone connection network

G.171			11-1988	Transmission plan aspects of privately operated networks <i>Deleted because it refers to obsolete Recommendations. For guidance on transmission planning or on private/public network interconnection, refer to ITU-T G.175 and G.108</i>	Withdrawn.
G.172			11-1988	Transmission plan aspects of international conference calls	
G.173			03-1993	Transmission planning aspects of the speech service in digital public land mobile networks	
G.174			06-1994	Transmission performance objectives for terrestrial digital wireless systems using portable terminals to access the PSTN	
G.175			05-2000	Transmission planning for private/public network interconnection of voice traffic	
G.176			04-1997	Planning guidelines for the integration of ATM technology into networks supporting voiceband services	
G.177			09-1999	Transmission planning for voiceband services over hybrid Internet/PSTN connections	

G.180-G.189: Protection and restoration of transmission systems











G.180			03-1993	Characteristics of N + M type direct transmission restoration systems for use on digital and analogue sections, links or equipment	
G.181			03-1993	Characteristics of 1 + 1 type restoration systems for use on digital transmission links	

G.190-G.199: Software tools for transmission systems













G.191			11-2000	Software tools for speech and audio coding standardization <i>This Recommendation includes 1 CD-ROM containing the software tools library (STL-2000)). The STL-2000 Manual is freely available from this Website for information purpose.</i>	
G.192			03-1996	A common digital parallel interface for speech standardization activities	







G.200-G.299: General characteristics common to all analogue carrier-transmission systems

G.210-G.219: Definitions and general considerations









G.211			11-1988	Make-up of a carrier link	
G.212			11-1988	Hypothetical reference circuits for analogue systems	
G.213			11-1988	Interconnection of systems in a main repeater station	
G.214			11-1988	Line stability of cable systems	
G.215			11-1988	Hypothetical reference circuit of 5000 km for analogue systems	

G.220-G.229: General Recommendations







G.221			11-1988	Overall recommendations relating to carrier-transmission systems	
G.222			11-1988	Noise objectives for design of carrier-transmission systems of 2500 km	
G.223			11-1988	Assumptions for the calculation of noise on hypothetical reference circuits for telephony	
G.224			11-1988	Maximum permissible value for the absolute power level (power referred to one milliwatt) of a signalling pulse <i>This Recommendation was formerly also included in Q series under number Q.16</i>	
G.225			11-1988	Recommendations relating to the accuracy of carrier frequencies	
G.226			11-1988	Noise on a real link	

G.227	 	11-1988	Conventional telephone signal	
G.228	 	11-1988	Measurement of circuit noise in cable systems using a uniform-spectrum random noise loading	
G.229	 	11-1988	Unwanted modulation and phase jitter	

G.230-G.239: Translating equipment used on various carrier-transmission systems

G.230	 	11-1988	Measuring methods for noise produced by modulating equipment and through-connection filters	
G.231	 	11-1988	Arrangement of carrier equipment	
G.232	 	11-1988	12-channel terminal equipments	
G.233	 	11-1988	Recommendations concerning translating equipments	
G.234		10-1976	8-channel terminal equipments <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.235		11-1988	16-channel terminal equipments <i>Deleted after its content became technically out of date</i>	Withdrawn.





G.240-G.299: Utilization of groups, supergroups, etc.

G.241	 	11-1988	Pilots on groups, supergroups, etc.	
G.242	 	11-1988	Through-connection of groups, supergroups, etc.	
G.243	 	11-1988	Protection of pilots and additional measuring frequencies at points where there is a through-connection	



G.300-G.399: Individual characteristics of international carrier telephone systems on metallic lines





G.311		11-1988	General characteristics of systems providing 12 carrier telephone circuits on an open-wire pair <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.312		11-1988	Intermediate repeaters for open-wire carrier systems conforming to Recommendation G.311 <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.313		11-1988	Open-wire lines for use with 12-channel carrier systems <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.314		10-1976	General characteristics of systems providing eight carrier telephone circuits on an open-wire pair <i>Deleted after its content became technically out of date</i>	Withdrawn.

G.320-G.329: Carrier telephone systems on unloaded symmetric cable pairs, providing groups or supergroups











G.322	 	11-1988	General characteristics recommended for systems on symmetric pair cables	
G.323		11-1988	A typical transistorized system on symmetric cable pairs <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.324		10-1976	General characteristics for valve-type systems on symmetric cable pairs <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.325	 	11-1988	General characteristics recommended for systems providing 12 telephone carrier circuits on a symmetric cable pair [(12 + 12) systems]	
G.326		11-1988	Typical systems on symmetric cable pairs [(12 + 12) systems] <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.327		10-1976	Valve-type systems offering 12 carrier telephone circuits on a symmetric cable pair [(12 + 12) systems] <i>Deleted after its content became technically out of date</i>	Withdrawn.

G.330-G.339: Carrier systems on 2.6/9.5 mm coaxial cable pairs



G.332	 	11-1988	12 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs	
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G.333	 	11-1988	60 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs	
G.334	 	11-1988	18 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs	
G.337		10-1976	General characteristics of systems on 2.6/9.5 mm coaxial cable pairs <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.338		10-1976	4 MHz valve-type systems on standardized 2.6/9.5 mm coaxial cable pairs <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.339		10-1976	12 MHz valve-type systems on standardized 2.6/9.5 mm coaxial cable pairs <i>Deleted after its content became technically out of date</i>	Withdrawn.

G.340-G.349: Carrier systems on 1.2/4.4 mm coaxial cable pairs



G.341	 	11-1988	1.3 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs	
G.343	 	11-1988	4 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs	
G.344	 	11-1988	6 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs	
G.345	 	11-1988	12 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs	
G.346	 	11-1988	18 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs	

G.350-G.399: Additional Recommendations on cable systems







G.352	 	11-1988	Interconnection of coaxial carrier systems of different designs	
G.356		11-1980	(120 + 120) channel systems on a single coaxial pair <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.361		11-1988	Systems providing three carrier telephone circuits on a pair of open-wire lines <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.371		11-1988	FDM carrier systems for submarine cable <i>Deleted after its content became technically out of date</i>	Withdrawn.

G.400-G.449: General characteristics of international carrier telephone systems on radio-relay or satellite links and interconnection with metallic lines



G.400-G.419: General Recommendations

G.411	 	11-1988	Use of radio-relay systems for international telephone circuits	
G.412		11-1988	Terminal equipments of radio-relay systems forming part of a general telecommunication network <i>Deleted after its content became technically out of date</i>	Withdrawn.





G.420-G.429: Interconnection of radio-relay links with carrier systems on metallic lines

G.421	 	11-1988	Methods of interconnection	
G.422	 	11-1988	Interconnection at audio-frequencies	
G.423	 	11-1988	Interconnection at the baseband frequencies of frequency-division multiplex radio-relay systems	

G.430-G.439: Hypothetical reference circuits



G.431	 	11-1988	Hypothetical reference circuits for frequency-division multiplex radio-relay systems	
G.433		11-1988	Hypothetical reference circuit for trans-horizon radio-relay systems for telephony using frequency-division multiplex <i>The text of this Recommendation can be found in CCIR Rec. 396 (1986). Deleted after its content became technically out of date</i>	Withdrawn.
G.434		11-1988	Hypothetical reference circuit for systems using analogue transmission in the fixed-satellite service <i>The text of this Recommendation can be found in CCIR Rec. 352 (1986). Deleted after its content became technically out of date</i>	Withdrawn.

G.440-G.449: Circuit noise

G.441	 	11-1988	Permissible circuit noise on frequency-division multiplex radio-relay systems	
G.442	 	11-1988	Radio-relay system design objectives for noise at the far end of a hypothetical reference circuit with reference to telegraphy transmission	
G.444		11-1988	Allowable noise power in the hypothetical reference circuit of trans-horizon radio-relay systems for telephony using frequency-division multiplex <i>The text of this Recommendation can be found in CCIR Rec. 397 (1986). Deleted after its content became technically out of date</i>	Withdrawn.
G.445		11-1988	Allowable noise power in the hypothetical reference circuit for frequency-division multiplex telephony in the fixed-satellite service <i>The text of this Recommendation can be found in CCIR Rec. 353 (1986). Deleted after its content became technically out of date</i>	Withdrawn.

G.450-G.499: Coordination of radiotelephony and line telephony

G.450-G.469: Radiotelephone circuits

G.451	 	11-1988	Use of radio links in international telephone circuits	
G.453		11-1988	Improved transmission system for HF radio-telephone circuits <i>The text of this Recommendation can be found in CCIR Rec. 455 and Report 354 entitled "Improved transmission systems for use over HF radiotelephone circuits (1986). Deleted after its content became technically out of date</i>	Withdrawn.
G.464		11-1988	Principles of the devices used to achieve privacy in radiotelephone conversations <i>The text of this Recommendation can be found in CCIR Rec. 336 (1986). Deleted after its content became technically out of date</i>	Withdrawn.

G.470-G.499: Links with mobile stations





G.473		11-1988	Interconnection of a maritime mobile satellite system with the international automatic switched telephone service; transmission aspects <i>Withdrawn because it provided transmission planning information that was obsolete and no longer used</i>	Withdrawn.
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G.500-G.599: Testing equipments

G.541		10-1976	Specification of factory lengths of loaded telecommunication cable <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.542		10-1976	Specification of loading coils for loaded telecommunication cables <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.543		10-1976	Specification for repeater sections of loaded telecommunication cable <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.544		10-1976	Specifications for terminal equipment and intermediate repeater stations <i>Deleted after its content became technically out of date</i>	Withdrawn.







G.600-G.699: Transmission media characteristics

G.600-G.609: General







G.601	 	11-1988	Terminology for cables	
G.602	 	11-1988	Reliability and availability of analogue cable transmission systems and associated equipments	

G.610-G.619: Symmetric cable pairs



G.611	 	11-1988	Characteristics of symmetric cable pairs for analogue transmission	
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G.612	 	11-1988	Characteristics of symmetric cable pairs designed for the transmission of systems with bit rates of the order of 6 to 34 Mbit/s	
G.613	 	11-1988	Characteristics of symmetric cable pairs usable wholly for the transmission of digital systems with a bit rate of up to 2 Mbit/s	
G.614	 	11-1988	Characteristics of symmetric pair star-quad cables designed earlier for analogue transmission systems and being used now for digital system transmission at bit rates of 6 to 34 Mbit/s	



















G.620-G.629: Land coaxial cable pairs

G.621	 	11-1988	Characteristics of 0.7/2.9 mm coaxial cable pairs	
G.622	 	11-1988	Characteristics of 1.2/4.4 mm coaxial cable pairs	
G.623	 	11-1988	Characteristics of 2.6/9.5 mm coaxial cable pairs	















G.630-G.649: Submarine cables















G.631	 	11-1988	Types of submarine cable to be used for systems with line frequencies of less than about 45 MHz	
G.641		11-1988	<i>Waveguide diameters Deleted after its content became technically out of date</i>	Withdrawn.

G.650-G.659: Optical fibre cables

G.650.1	 	06-2002	Definitions and test methods for linear, deterministic attributes of single-mode fibre and cable <i>Results from the subdivision of ITU-T Rec. G.650 (2000-10)</i>	
G.650.1 (2002) Amendment 1	 	03-2003		
G.650.2	 	06-2002	Definitions and test methods for statistical and non-linear related attributes of single-mode fibre and cable <i>Results from the subdivision of ITU-T Rec. G.650 (2000-10)</i>	
G.650.2 (2002) Amendment 1	 	03-2003		
G.651	 	02-1998	Characteristics of a 50/125 µm multimode graded index optical fibre cable	
G.652	 	03-2003	Characteristics of a single-mode optical fibre and cable	
G.653	 	12-2003	Characteristics of a dispersion-shifted single-mode optical fibre and cable	
G.654	 	06-2002	Characteristics of a cut-off shifted single-mode optical fibre and cable	
G.655	 	03-2003	Characteristics of a non-zero dispersion-shifted single-mode optical fibre and cable	





















G.660-G.699: Characteristics of optical components and subsystems

G.661	 	10-1998	Definition and test methods for the relevant generic parameters of optical amplifier devices and subsystems	
G.662	 	10-1998	Generic characteristics of optical amplifier devices and subsystems	
G.663	 	04-2000	Application related aspects of optical amplifier devices and subsystems	
G.663 (2000) Amendment 1	 	01-2003	Amendments to Appendix II	
G.664	 	03-2003	Optical safety procedures and requirements for optical transport systems	
G.671	 	06-2002	Transmission characteristics of optical components and subsystems	
G.681		10-1996	<i>Functional characteristics of interoffice and long-haul line systems using optical amplifiers, including optical multiplexing Deleted since its content is covered by Recommendations G.664 and G.783</i>	Withdrawn.
G.691	 	12-2003	Optical interfaces for single-channel STM-64 and other SDH systems with optical amplifiers	









G.692	 	10-1998	Optical interfaces for multichannel systems with optical amplifiers <i>Covering note, 07.01.2000: Corrigendum 1</i>	
G.692 (1998) Corrigendum 1	 	01-2000		
G.692 (1998) Corrigendum 2	 	06-2002		
G.693	 	12-2003	Optical interfaces for intra-office systems	
G.694.1	 	06-2002	Spectral grids for WDM applications: DWDM frequency grid	
G.694.2	 	12-2003	Spectral grids for WDM applications: CWDM wavelength grid	
G.695	 	02-2004	Optical interfaces for coarse wavelength division multiplexing applications	

G.700-G.799: Digital terminal equipments

G.700-G.709: General







































G.700		11-1988	Framework of the series G.700, G.800 and G.900 Recommendations <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.701	 	03-1993	Vocabulary of digital transmission and multiplexing, and pulse code modulation (PCM) terms	
G.702	 	11-1988	Digital hierarchy bit rates	
G.703	 	11-2001	Physical/electrical characteristics of hierarchical digital interfaces	
G.704	 	10-1998	Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels	
G.705		11-1988	Characteristics required to terminate digital links on a digital exchange <i>The content of this Recommendation is now covered by ITU-T Q.500 series, and more specifically Q.554</i>	Withdrawn.
G.705	 	10-2000	Characteristics of plesiochronous digital hierarchy (PDH) equipment functional blocks	
G.706	 	04-1991	Frame alignment and cyclic redundancy check (CRC) procedures relating to basic frame structures defined in Recommendation G.704	
G.707/Y.1322	 	12-2003	Network node interface for the synchronous digital hierarchy (SDH)	Pre-published.
G.708		03-1993	Network node interface for the synchronous digital hierarchy <i>Merged with ITU-T G.707 in 1996</i>	Withdrawn.
G.708	 	07-1999	Sub STM-0 network node interface for the synchronous digital hierarchy (SDH)	
G.709		03-1993	Synchronous multiplexing structure <i>Merged with ITU-T G.707 in 1993</i>	Withdrawn.
G.709/Y.1331	 	03-2003	Interfaces for the Optical Transport Network (OTN)	
G.709/Y.1331 (2003) Amendment 1	 	12-2003		Pre-published.

G.710-G.719: Coding of analogue signals by pulse code modulation

G.711	 	11-1988	Pulse code modulation (PCM) of voice frequencies <i>Corresponding ANSI-C code is available in the G.711 module of the ITU-T G.191 Software Tools Library.</i>	
G.711 Appendix I	 	09-1999	A high quality low-complexity algorithm for packet loss concealment with G.711	
G.711 Appendix II	 	02-2000	A comfort noise payload definition for ITU-T G.711 use in packet-based multimedia communication systems	
G.712	 	11-2001	Transmission performance characteristics of pulse code modulation channels	
G.713		11-1988	Performance characteristics of PCM channels between 2-wire interfaces at voice frequencies <i>The content of this Recommendation is now covered by ITU-T G.712</i>	Withdrawn.

G.714			11-1988	Separate performance characteristics for the encoding and decoding sides of PCM channels applicable to 4-wire voice-frequency interfaces <i>The content of this Recommendation is now covered by ITU-T G.712</i>	Withdrawn.
G.715			11-1988	Separate performance characteristics for the encoding and decoding side of PCM channels applicable to 2-wire interfaces <i>The content of this Recommendation is now covered by ITU-T G.712</i>	Withdrawn.

G.720-G.729: Coding of analogue signals by methods other than PCM

G.720			07-1995	Characterization of low-rate digital voice coder performance with non-voice signals	
G.722			11-1988	7 kHz audio-coding within 64 kbit/s <i>Corresponding ANSI-C code is available in the G722 module of the ITU-T G.191 Software Tools Library</i>	
G.722 (1988) Erratum 1			05-2003		
G.722 Annex A			03-1993	Testing signal-to-total distortion ratio for 7 kHz audio-codecs at 64 kbit/s Recommendation G.722 connected back-to-back	
G.722 Appendix II			03-1987	Digital test sequences for the verification of the G.722 64 kbit/s SB-ADPCM 7 kHz codec <i>This document corresponds to ITU-T Rec. G.722 Appendix II which was published in the Blue Book (1988). It includes one diskette containing the digital test sequences for the verification of the G.722 SB-ADPCM codec.</i>	
G.722.1			09-1999	Coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss <i>This Recommendation includes an electronic attachment containing the reference code (release 1.2) and the test vectors for ITU-T G.722.1 algorithm implementation verification. This release includes the corrections indicated in corrigendum 1 (11/2000)</i>	
G.722.1 (1999) Corrigendum 1			11-2000		
G.722.1 Annex A			02-2000	Packet format, capability identifiers and capability parameters	
G.722.1 Annex B			11-2000	Floating-point implementation for G.722.1 <i>This annex includes an electronic attachment containing the reference code and the test vectors for ITU-T G.722.1/Annex B floating-point algorithm implementation verification</i>	
G.722.2			07-2003	Wideband coding of speech at around 16 kbit/s using Adaptive Multi-Rate Wideband (AMR-WB)	Pre-published.
G.722.2 Annex A			01-2002	Comfort noise aspects	
G.722.2 Annex B			01-2002	Source Controlled Rate operation	
G.722.2 Annex B (2002) Erratum 1			07-2003		
G.722.2 Annex C			03-2004	Fixed-point C-code	
G.722.2 Annex D			07-2003	Digital test sequences <i>This Annex includes an electronic attachment containing the digital test sequences for a bit-exact implementation of the G.722.2 adaptive multi-rate wideband (AMR-WB) speech transcoder, voice activity detection, comfort noise generation, and source controlled rate operation, version 5.7.0. Test sequences are freely available on the ITU publications website. They are also available for a fee on a CD-ROM from the ITU Sales department at sales@itu.int</i>	
G.722.2 Annex E			01-2002	Frame structure	
G.722.2 Annex E (2002) Corrigendum 1			07-2003	<i>Published as a covering note</i>	
G.722.2 Annex F			11-2002	AMR-WB usage in H.245	
G.722.2 Appendix I			02-2002	Error concealment of erroneous or lost frames	
G.722.2 Appendix I (2002) Amendment 1			07-2003	<i>Published as a covering note</i>	

G.723





























11-1988




















Extensions of Recommendation G.721 adaptive differential pulse code modulation to 24 and 40 kbit/s for digital circuit multiplication equipment application

Withdrawn.

The content of 1988 edition of ITU-T G.723 is now covered by ITU-T G.726













G.723 Speech coders

G.723.1	 	03-1996	Dual rate speech coder for multimedia communications transmitting at 5.3 and 6.3 kbit/s <i>Test vectors, test sequences and C Reference code described in this Recommendation are common to Recommendation main body and to Annex A, and may be found on 3 diskettes included with G.723.1 Annex A.</i>
G.723.1 Annex A	 	11-1996	Silence compression scheme <i>This Annex includes 3 diskettes which are common to Recommendation main body and to this annex and which contain test vectors and C reference code for implementation verification of the G.723.1 fixed point dual rate speech coder for multimedia communications.</i>
G.723.1 Annex B	 	11-1996	Alternative specification based on floating point arithmetic <i>This Annex includes one CD-ROM containing the reference code and the test vectors for implementation verification of the G.723.1 floating point speech coder. The CD-ROM may be replaced on demand by 14 diskettes.</i>
G.723.1 Annex C	 	11-1996	Scalable channel coding scheme for wireless applications <i>This Annex includes one diskette containing the reference code and the test vectors for implementation verification of the scalable channel coding scheme.</i>
G.724	 	11-1988	Characteristics of a 48-channel low bit rate encoding primary multiplex operating at 1544 kbit/s
G.725	 	11-1988	System aspects for the use of the 7 kHz audio codec within 64 kbit/s
G.726	 	12-1990	40, 32, 24, 16 kbit/s Adaptive Differential Pulse Code Modulation (ADPCM) <i>Corresponding ANSI-C code is available in the G.726 module of the ITU-T G.191 Software Tools Library</i>
G.726 Annex A	 	11-1994	Extensions of Recommendation G.726 for use with uniform-quantized input and output
G.726 Annex B	 	07-2003	Packet format, capability identifier and capability parameters for H.245 signalling
G.726 Appendix II		03-1991	Digital test sequences for the verification of the G.726 40, 32, 24 and 16 kbit/s ADPCM algorithm <i>This document corresponds to G.726 Appendix II. It includes 2 diskettes containing respectively the A-Law and Mu-Law digital test sequences for the verification of the G.726 ADPCM codec implementations. The document reproduces the user guide published in the CCITT collective letter No. 11/XV (1991).</i>
G.726 Appendix III	 	05-1994	Comparison of ADPCM algorithms <i>This Appendix is published with the double number G.726 App. III and G.727 App. II</i>
G.727	 	12-1990	5-, 4-, 3- and 2-bit/sample embedded adaptive differential pulse code modulation (ADPCM) <i>Corresponding ANSI-C code is available in the G.727 module of the ITU-T G.191 Software Tools Library</i>
G.727 Annex A	 	11-1994	Extensions of Recommendation G.727 for use with uniform-quantized input and output
G.727 Appendix I		03-1991	Digital test sequences for the verification of the G.727 5-, 4-, 3- and 2-bit/sample embedded ADPCM algorithm <i>This document corresponds to G.727 Appendix I. It includes 6 diskettes containing digital test sequences for the verification of the G.727 embedded ADPCM codec implementations. The document reproduces the user guide published in the CCITT collective letter No. 12/XV (1991).</i>
G.727 Appendix II	 	05-1994	Comparison of ADPCM algorithms <i>This Appendix is published with the double number G.726 App. III</i>







			<i>and G.727 App. II</i>
G.728	 	09-1992	Coding of speech at 16 kbit/s using low-delay code excited linear prediction
G.728 Annex G	 	11-1994	16 kbit/s fixed point specification
G.728 Annex G (1994) Corrigendum 1	 	02-2000	
G.728 Annex H	 	05-1999	Variable bit rate LD-CELP operation mainly for DCME at rates less than 16 kbit/s <i>This Annex includes 1 CD-ROM containing the test data for verification of G.728 Annex H low bit rate LD-CELP implementations.</i>
G.728 Annex I	 	05-1999	Frame or packet loss concealment for the LD-CELP decoder
G.728 Annex J	 	09-1999	Variable bit-rate operation of LD-CELP mainly for voiceband-data applications in DCME <i>This Annex includes 1 CD-ROM containing the test vectors for verification of G.728 Annex J variable bit-rate LD-CELP implementations.</i>
G.728 Appendix I	 	07-1995	Programs and test sequences for implementation verification of the algorithm of the G.728 16 kbit/s LD-CELP speech coder <i>This document corresponds to G.728 Appendix I. It includes 4 diskettes containing programs and test sequences for verification of the floating point and fixed point implementations of the G.728 LD-CELP algorithm. The document reproduces the user guide published in the CCITT collective letter No. 17/XV (1992).</i>
G.728 Appendix II	 	11-1995	Speech performance
G.729	 	03-1996	Coding of speech at 8 kbit/s using conjugate-structure algebraic-code-excited linear prediction (CS-ACELP) <i>This Recommendation includes 3 diskettes containing source code and test sequences for implementation verification of the algorithm of the G.729 8 kbit/s CS-ACELP speech coder.</i>
G.729 Annex A	 	11-1996	Reduced complexity 8 kbit/s CS-ACELP speech codec <i>This Annex includes 3 diskettes containing source code and test sequences for implementation verification of the algorithm of the G.729 reduced complexity 8 kbit/s CS-ACELP speech coder.</i>
G.729 Annex B	 	10-1996	A silence compression scheme for G.729 optimized for terminals conforming to Recommendation V.70 <i>This Annex includes 1 electronic attachment containing source code and test sequences for implementation verification of the algorithm of the G.729 Silence compression scheme version 1.4, which reflects modifications given in Corrigendum 2 (02/2000).</i>
G.729 Annex B (1996) Cor.1		02-1998	<i>This corrigendum was not published and concerns only the software; the resulting version 1.3 had been included in the published ITU-T Recommendation G.729 Annex B (10/1996)</i>
G.729 Annex B (1996) Corrigendum 2	 	02-2000	<i>This corrigendum concerns only the software; the resulting version 1.4 is included in the published ITU-T Recommendation G.729 Annex B (10/1996)</i>
G.729 Annex B (1996) Corrigendum 3	 	03-2001	<i>Published as a covering note</i>
G.729 Annex C	 	09-1998	Reference floating-point implementation for G.729 CS-ACELP 8 kbit/s speech coding <i>This Annex includes 1 diskette containing version 1.01 of reference C code for floating point implementation of the G.729 8 kbit/s CS-ACELP speech coder. Diskette + Annex.</i>
G.729 Annex C+	 	02-2000	Reference floating-point implementation for integrating G.729 CS-ACELP speech coding main body with Annexes B, D and E <i>This annex includes an electronic attachment containing version 2.1 of reference C code for floating point implementation of CS-ACELP at 6.4/8/11.8 kbit/s with DTX functionality.</i>
G.729 Annex C+ (2000) Corrigendum 1	 	03-2001	<i>Published as a covering note</i>

G.729 Annex D	 	09-1998	6.4 kbit/s CS-ACELP speech coding algorithm <i>This Annex includes one electronic attachment containing version 1.3 of source C code for fixed point implementation of the G.729 6.4 kbit/s CS-ACELP speech coder, which reflects modifications given in Corrigendum 1 (02/2000).</i>
G.729 Annex D (1998) Corrigendum 1	 	02-2000	<i>This corrigendum concerns only the software; the resulting version 1.3 is included in the published ITU-T Recommendation G.729 Annex D (09/1998)</i>
G.729 Annex E	 	09-1998	11.8 kbit/s CS-ACELP speech coding algorithm <i>This Annex includes one electronic attachment containing version 1.3 of source C code and test vectors for fixed point implementation of the G.729 11.8 kbit/s CS-ACELP speech coder, which reflects modifications given in Corrigendum 1 (02/2000).</i>
G.729 Annex E (1998) Corrigendum 1	 	02-2000	<i>This corrigendum concerns only the software; the resulting version 1.3 is included in the published ITU-T Recommendation G.729 Annex E (09/1998)</i>
G.729 Annex F	 	02-2000	Reference implementation of G.729 Annex B DTX functionality for Annex D <i>This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s 8 kbit/s with DTX functionality.</i>
G.729 Annex F (2000) Corrigendum 1	 	03-2001	<i>Published as a covering note</i>
G.729 Annex G	 	02-2000	Reference implementation of G.729 Annex B DTX functionality for Annex E <i>This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 8 kbit/s and 11.8 kbit/s with DTX functionality.</i>
G.729 Annex G (2000) Corrigendum 1	 	03-2001	<i>Published as a covering note</i>
G.729 Annex H	 	02-2000	Reference implementation of switching procedure between G.729 Annexes D and E <i>This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s 8 kbit/s and 11.8 kbit/s without DTX functionality.</i>
G.729 Annex I	 	02-2000	Reference fixed-point implementation for integrating G.729 CS-ACELP speech coding main body with Annexes B, D and E <i>This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s 8 kbit/s and 11.8 kb/s with DTX functionality.</i>
G.729 Annex I (2000) Corrigendum 1	 	03-2001	<i>Published as a covering note</i>
G.729 Appendix I	 	06-2001	External synchronous reset performance for G.729 codecs in systems using external VAD/DTX/CNG















G.730-G.739: Principal characteristics of primary multiplex equipment

G.731	 	11-1988	Primary PCM multiplex equipment for voice frequencies
G.732	 	11-1988	Characteristics of primary PCM multiplex equipment operating at 2048 kbit/s
G.733	 	11-1988	Characteristics of primary PCM multiplex equipment operating at 1544 kbit/s
G.734	 	11-1988	Characteristics of synchronous digital multiplex equipment operating at 1544 kbit/s
G.735	 	11-1988	Characteristics of primary PCM multiplex equipment operating at 2048 kbit/s and offering synchronous digital access at 384 kbit/s and/or 64 kbit/s
G.736	 	03-1993	Characteristics of a synchronous digital multiplex equipment











operating at 2048 kbit/s

G.737	 	11-1988	Characteristics of an external access equipment operating at 2048 kbit/s offering synchronous digital access at 384 kbit/s and/or 64 kbit/s
G.738	 	11-1988	Characteristics of primary PCM multiplex equipment operating at 2048 kbit/s and offering synchronous digital access at 320 kbit/s and/or 64 kbit/s
G.739	 	11-1988	Characteristics of an external access equipment operating at 2048 kbit/s offering synchronous digital access at 320 kbit/s and/or 64 kbit/s





















G.740-G.749: Principal characteristics of second order multiplex equipment





G.741	 	11-1988	General considerations on second order multiplex equipments
G.742	 	11-1988	Second order digital multiplex equipment operating at 8448 kbit/s and using positive justification
G.743	 	11-1988	Second order digital multiplex equipment operating at 6312 kbit/s and using positive justification
G.744	 	11-1988	Second order PCM multiplex equipment operating at 8448 kbit/s
G.745	 	11-1988	Second order digital multiplex equipment operating at 8448 kbit/s and using positive/zero/negative justification
G.746	 	11-1988	Characteristics of second order PCM multiplex equipment operating at 6312 kbit/s
G.747	 	11-1988	Second order digital multiplex equipment operating at 6312 kbit/s and multiplexing three tributaries at 2048 kbit/s

G.750-G.759: Principal characteristics of higher order multiplex equipment

G.751	 	11-1988	Digital multiplex equipments operating at the third order bit rate of 34 368 kbit/s and the fourth order bit rate of 139 264 kbit/s and using positive justification
G.752	 	11-1988	Characteristics of digital multiplex equipments based on a second order bit rate of 6312 kbit/s and using positive justification
G.753	 	11-1988	Third order digital multiplex equipment operating at 34 368 kbit/s and using positive/zero/negative justification
G.754	 	11-1988	Fourth order digital multiplex equipment operating at 139 264 kbit/s and using positive/zero/negative justification
G.755	 	11-1988	Digital multiplex equipment operating at 139 264 kbit/s and multiplexing three tributaries at 44 736 kbit/s

G.760-G.769: Principal characteristics of transcoder and digital multiplication equipment











G.761	 	11-1988	General characteristics of a 60-channel transcoder equipment
G.762	 	11-1988	General characteristics of a 48-channel transcoder equipment
G.763	 	10-1998	Digital circuit multiplication equipment using G.726 ADPCM and digital speech interpolation <i>This Recommendation includes 2 diskettes. The first one contains A-Law and m-Law test vectors for DCME verification. The second one contains example transmit/receive SDLs. Covering note, May 2000: Erratum</i>
G.763 Erratum 1	 	12-2000	
G.764	 	12-1990	Voice packetization – Packetized voice protocols
G.764 Appendix I	 	11-1995	Packetization guide
G.765	 	09-1992	Packet circuit multiplication equipment
G.765 Appendix I	 	11-1995	A guide to PCME
G.766	 	11-1996	Facsimile demodulation/remodulation for digital circuit multiplication equipment
G.767	 	10-1998	Digital circuit multiplication equipment using 16 kbit/s LD-CELP, digital speech interpolation and facsimile demodulation/remodulation

G.768	 	03-2001	Digital circuit multiplication equipment using 8 kbit/s CS-ACELP	
G.769/Y.1242	 	08-2002	Circuit multiplication equipment optimized for IP-based networks	





















G.770-G.779: Operations, administration and maintenance features of transmission equipment

G.771		11-1988	Q-interfaces and associated protocols for transmission equipment in the TMN <i>Deleted after its content became technically out of date</i>	Withdrawn.
G.772	 	03-1993	Protected monitoring points provided on digital transmission systems	
G.773	 	03-1993	Protocol suites for Q-interfaces for management of transmission systems	
G.774	 	02-2001	Synchronous digital hierarchy (SDH) – Management information model for the network element view	
G.774.1	 	02-2001	Synchronous digital hierarchy (SDH) – Bidirectional performance monitoring for the network element view	
G.774.2	 	02-2001	Synchronous digital hierarchy (SDH) – Configuration of the payload structure for the network element view	
G.774.3	 	02-2001	Synchronous digital hierarchy (SDH) – Management of multiplex-section protection for the network element view	
G.774.4	 	02-2001	Synchronous digital hierarchy (SDH) – Management of the subnetwork connection protection for the network element view	
G.774.5	 	02-2001	Synchronous digital hierarchy (SDH) – Management of connection supervision functionality (HCS/LCS) for the network element view	
G.774.6	 	02-2001	Synchronous digital hierarchy (SDH) – Unidirectional performance monitoring for the network element view	
G.774.7	 	02-2001	Synchronous digital hierarchy (SDH) – Management of lower order path trace and interface labelling for the network element view	
G.774.8	 	02-2001	Synchronous digital hierarchy (SDH) – Management of radio-relay systems for the network element view	
G.774.9	 	02-2001	Synchronous digital hierarchy (SDH) – Configuration of linear multiplex-section protection for the network element view	
G.774.10	 	02-2001	Synchronous digital hierarchy (SDH) – Multiplex Section (MS) shared protection ring management for the network element view	
G.775	 	10-1998	Loss of Signal (LOS), Alarm Indication Signal (AIS) and Remote Defect Indication (RDI) defect detection and clearance criteria for PDH signals	
G.776.1	 	10-1998	Managed objects for signal processing network elements <i>This Recommendation includes one diskette containing the information model of Signal Processing Network Elements (SPNE).</i>	
G.776.3	 	04-2000	ADPCM DCME configuration map report	

G.780-G.789: Principal characteristics of multiplexing equipment for the synchronous digital hierarchy



















G.780	 	07-1999	Vocabulary of terms for synchronous digital hierarchy (SDH) networks and equipment	
G.781		01-1994	Structure of Recommendations on equipment for the synchronous digital hierarchy (SDH) <i>Merged with ITU-T G.783 in 1997</i>	Withdrawn.
G.781	 	07-1999	Synchronization layer functions	
G.782		01-1994	Types and general characteristics of synchronous digital hierarchy (SDH) equipment <i>Merged with ITU-T G.783 in 1997</i>	Withdrawn.
G.783	 	02-2004	Characteristics of synchronous digital hierarchy (SDH) equipment functional blocks	Pre-published.
G.784	 	07-1999	Synchronous digital hierarchy (SDH) management	
G.785	 	11-1996	Characteristics of a flexible multiplexer in a synchronous digital hierarchy environment	

G.790-G.799: Other terminal equipment











G.791	 	11-1988	General considerations on transmultiplexing equipments	
G.792	 	11-1988	Characteristics common to all transmultiplexing equipments	
G.793	 	11-1988	Characteristics of 60-channel transmultiplexing equipments	
G.794	 	11-1988	Characteristics of 24-channel transmultiplexing equipments	
G.795	 	11-1988	Characteristics of codecs for FDM assemblies	
G.796	 	09-1992	Characteristics of a 64 kbit/s cross-connect equipment with 2048 kbit/s access ports	
G.796 (2000) Corrigendum 1	 	10-1998		
G.797	 	03-1996	Characteristics of a flexible multiplexer in a plesiochronous digital hierarchy environment	
G.798	 	01-2002	Characteristics of optical transport network hierarchy equipment functional blocks	
G.798 (2002) Amendment 1	 	06-2002		

G.800-G.899: Digital networks













G.800-G.809: General aspects











G.801	 	11-1988	Digital transmission models	
G.802	 	11-1988	Interworking between networks based on different digital hierarchies and speech encoding laws	
G.803	 	03-2000	Architecture of transport networks based on the synchronous digital hierarchy (SDH)	
G.804	 	02-1998	ATM cell mapping into plesiochronous digital hierarchy (PDH)	
G.805	 	03-2000	Generic functional architecture of transport networks	
G.806	 	02-2004	Characteristics of transport equipment – Description methodology and generic functionality	Pre-published.
G.807/Y.1302	 	07-2001	Requirements for automatic switched transport networks (ASTN)	
G.808.1	 	12-2003	Generic protection switching – Linear trail and sub-network protection	Pre-published.
G.809	 	03-2003	Functional architecture of connectionless layer networks	

G.810-G.819: Design objectives for digital networks





G.810	 	08-1996	Definitions and terminology for synchronization networks	
G.810 (1996) Corrigendum 1	 	11-2001		
G.811	 	09-1997	Timing characteristics of primary reference clocks	
G.812	 	06-1998	Timing requirements of slave clocks suitable for use as node clocks in synchronization networks	
G.813	 	03-2003	Timing characteristics of SDH equipment slave clocks (SEC)	

G.820-G.829: Quality and availability targets







G.821	 	12-2002	Error performance of an international digital connection operating at a bit rate below the primary rate and forming part of an Integrated Services Digital Network	
G.822	 	11-1988	Controlled slip rate objectives on an international digital connection	
G.823	 	03-2000	The control of jitter and wander within digital networks which are based on the 2048 kbit/s hierarchy	
G.824	 	03-2000	The control of jitter and wander within digital networks which are based on the 1544 kbit/s hierarchy	
G.825	 	03-2000	The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy (SDH)	
G.825 Erratum 1	 	08-2001		

G.826	 	12-2002	End-to-end error performance parameters and objectives for international, constant bit-rate digital paths and connections	
G.827.1		11-2000	Availability performance objectives for end-to-end international constant bit-rate digital paths at or above the primary rate <i>Deleted on 13/04/2004 after the incorporation of its content in G.827 (09/2003)</i>	Withdrawn.
G.827	 	09-2003	Availability performance parameters and objectives for end-to-end international constant bit-rate digital paths	
G.828	 	03-2000	Error performance parameters and objectives for international, constant bit-rate synchronous digital paths	
G.828 (2000) Corrigendum 1	 	07-2001		
G.829	 	12-2002	Error performance events for SDH multiplex and regenerator sections	

G.830-G.839: Network capabilities and functions







G.831	 	03-2000	Management capabilities of transport networks based on the synchronous digital hierarchy (SDH)	
G.832	 	10-1998	Transport of SDH elements on PDH networks – Frame and multiplexing structures	

G.840-G.849: SDH network characteristics



G.841	 	10-1998	Types and characteristics of SDH network protection architectures	
G.841 (1998) Corrigendum 1	 	08-2002		
G.842	 	04-1997	Interworking of SDH network protection architectures	

G.850-G.859: Management of transport network















G.851.1	 	11-1996	Management of the transport network – Application of the RM-ODP framework	
G.852.1	 	11-1996	Enterprise viewpoint for simple subnetwork connection management	
G.852.2	 	03-1999	Enterprise viewpoint description of transport network resource model	
G.852.3	 	03-1999	Enterprise viewpoint for topology management	
G.852.6	 	03-1999	Enterprise viewpoint for trail management	
G.852.8	 	03-1999	Enterprise viewpoint for pre-provisioned adaptation management	
G.852.10	 	03-1999	Enterprise viewpoint for pre-provisioned link connection management	
G.852.12	 	03-1999	Enterprise viewpoint for pre-provisioned link management	
G.852.16	 	01-2001	Enterprise viewpoint for pre-provisioned route discovery	
G.853.1	 	03-1999	Common elements of the information viewpoint for the management of a transport network	
G.853.2	 	11-1996	Subnetwork connection management information viewpoint	
G.853.3	 	03-1999	Information viewpoint for topology management	
G.853.6	 	03-1999	Information viewpoint for trail management	
G.853.8	 	03-1999	Information viewpoint for pre-provisioned adaptation management	
G.853.10	 	03-1999	Information viewpoint for pre-provisioned link connection management	
G.853.12	 	03-1999	Information viewpoint for pre-provisioned link management	
G.853.16	 	01-2001	Information viewpoint for pre-provisioned route discovery	
G.854.1	 	11-1996	Computational interfaces for basic transport network model	
G.854.3	 	03-1999	Computational viewpoint for topology management	
G.854.6	 	03-1999	Computational viewpoint for trail management	
G.854.8	 	03-1999	Computational viewpoint for pre-provisioned adaptation management	
G.854.10	 	03-1999	Computational viewpoint for pre-provisioned link connection management	

G.854.12	 	03-1999	Computational viewpoint for pre-provisioned link management	
G.854.16	 	01-2001	Computational viewpoint for pre-provisioned route discovery	
G.855.1	 	03-1999	GDMO engineering viewpoint for the generic network level model	

G.860-G.869: SDH radio and satellite systems integration





G.861	 	08-1996	Principles and guidelines for the integration of satellite and radio systems in SDH transport networks	
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G.870-G.879: Optical transport networks



G.871/Y.1301	 	10-2000	Framework of Optical Transport Network Recommendations	
G.872	 	11-2001	Architecture of optical transport networks	
G.872 (2001) Amendment 1	 	12-2003		
G.873.1	 	03-2003	Optical Transport Network (OTN): Linear protection	
G.873.1 Erratum 1	 	10-2003		
G.874	 	11-2001	Management aspects of the optical transport network element	
G.874.1	 	01-2002	Optical transport network (OTN): Protocol-neutral management information model for the network element view	

G.900-G.999: Digital sections and digital line system



G.900-G.909: General

G.901	 	11-1988	General considerations on digital sections and digital line systems	
G.902	 	11-1995	Framework Recommendation on functional access networks (AN) – Architecture and functions, access types, management and service node aspects	



G.910-G.919: Parameters for optical fibre cable systems

G.911	 	04-1997	Parameters and calculation methodologies for reliability and availability of fibre optic systems	
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G.920-G.929: Digital sections at hierarchical bit rates based on a bit rate of 2048 kbit/s

G.921	 	11-1988	Digital sections based on the 2048 kbit/s hierarchy	
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





G.930-G.939: Digital line transmission systems on cable at non-hierarchical bit rates

G.931	 	11-1988	<p>Digital line sections at 3152 kbit/s <i>This Recommendation was deleted since no more significant content remained after the removal of the material in its Annex A to new Appendix III/G.703 "3152 kbit/s interface specification for use in North America".</i></p>	Withdrawn.
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G.940-G.949: Digital line systems provided by FDM transmission bearers

G.941	 	11-1988	Digital line systems provided by FDM transmission bearers	
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G.950-G.959: Digital line systems

G.950	 	11-1988	General considerations on digital line systems	
G.951	 	11-1988	Digital line systems based on the 1544 kbit/s hierarchy on symmetric pair cables	
G.952	 	11-1988	Digital line systems based on the 2048 kbit/s hierarchy on symmetric pair cables	
G.953	 	11-1988	Digital line systems based on the 1544 kbit/s hierarchy on coaxial pair cables	
G.954	 	11-1988	Digital line systems based on the 2048 kbit/s hierarchy on coaxial	







pair cables

G.955	 	11-1996	Digital line systems based on the 1544 kbit/s and the 2048 kbit/s hierarchy on optical fibre cables	
G.956		11-1988	Digital line systems based on the 2048 kbit/s hierarchy on optical fibre cables <i>The content of this Recommendation is now covered by ITU-T G.955</i>	Withdrawn.
G.957	 	07-1999	Optical interfaces for equipments and systems relating to the synchronous digital hierarchy	
G.957 (1999) Amendment 1	 	12-2003		
G.958		11-1994	Digital line systems based on the synchronous digital hierarchy for use on optical fibre cables <i>Deleted since its content is covered by Recommendations G.783 and G.798</i>	Withdrawn.
G.959.1	 	12-2003	Optical transport network physical layer interfaces	

















G.960-G.969: Digital section and digital transmission systems for customer access to ISDN

G.960	 	03-1993	Access digital section for ISDN basic rate access	
G.961	 	03-1993	Digital transmission system on metallic local lines for ISDN basic rate access <i>Covering note, 1st August 2000: Corrigendum 1</i>	
G.961 erratum	 	08-2000		
G.962	 	03-1993	Access digital section for ISDN primary rate at 2048 kbit/s	
G.962 (1993) Amendment 1	 	06-1997	Maintenance channel	
G.963	 	03-1993	Access digital section for ISDN primary rate at 1544 kbit/s	
G.964	 	03-2001	V-Interfaces at the digital local exchange (LE) – V5.1 interface (based on 2048 kbit/s) for the support of access network (AN)	
G.965	 	03-2001	V-interfaces at the digital local exchange (LE) – V5.2 interface (based on 2048 kbit/s) for the support of access network (AN)	
G.966	 	02-1999	Access digital section for B-ISDN	































































G.967 V-interfaces at the service node (SN)











































G.967.1	 	06-1998	VB5.1 reference point specification <i>This Recommendation includes one diskette containing the SDL process diagrams corresponding to the VB5.1 reference point.</i>	
G.967.2	 	02-1999	VB5.2 reference point specification <i>This Recommendation includes one diskette containing the SDL process diagrams corresponding to the VB5.2 reference point.</i>	
G.967.3	 	03-2000	Protocol implementation conformance statements for interfaces at VB5 reference points	

G.970-G.979: Optical fibre submarine cable systems







G.971	 	04-2000	General features of optical fibre submarine cable systems	
G.972	 	10-2000	Definition of terms relevant to optical fibre submarine cable systems	
G.973	 	12-2003	Characteristics of repeaterless optical fibre submarine cable systems	Pre-published.
G.974	 	03-1993	Characteristics of regenerative optical fibre submarine cable systems	
G.975	 	10-2000	Forward error correction for submarine systems	
G.975.1	 	02-2004	Forward error correction for high bit-rate DWDM submarine systems	Pre-published.
G.976	 	10-2000	Test methods applicable to optical fibre submarine cable systems	
G.977	 	03-2004	Characteristics of optically amplified optical fibre submarine cable systems	Pre-published.

G.980-G.989: Optical line systems for local and access networks

G.981	 	01-1994	PDH optical line systems for the local network	
G.982	 	11-1996	Optical access networks to support services up to the ISDN primary rate or equivalent bit rates	
G.983.1	 	10-1998	Broadband optical access systems based on Passive Optical Networks (PON)	
G.983.1 (1998) Corrigendum 1	 	07-1999		
G.983.1 (1998) Amendment 1	 	11-2001		
G.983.1 (1998) Corrigendum 1	 	03-2002		
G.983.1 (1998) Amendment 2	 	03-2003		
G.983.2	 	06-2002	ONT management and control interface specification for B-PON	
G.983.2 (2002) Amendment 1	 	03-2003		
G.983.3	 	03-2001	A broadband optical access system with increased service capability by wavelength allocation	
G.983.3 (2001) Amendment 1	 	06-2002		
G.983.4	 	11-2001	A broadband optical access system with increased service capability using dynamic bandwidth assignment (DBA)	
G.983.4 (2001) Amendment 1	 	12-2003	New Annex A – Performance monitoring parameters	
G.983.5	 	01-2002	A broadband optical access system with enhanced survivability	
G.983.6	 	06-2002	ONT management and control interface specifications for B-PON system with protection features	
G.983.7	 	11-2001	ONT Management and Control Interface specification for Dynamic Bandwidth Assignment (DBA) B-PON system	
G.983.8	 	03-2003	B-PON OMCI support for IP, ISDN, video, VLAN tagging, VC cross-connections and other select functions	
G.984.1	 	03-2003	Gigabit-capable Passive Optical Networks (G-PON): General characteristics	
G.984.2	 	03-2003	Gigabit-capable Passive Optical Networks (G-PON): Physical Media Dependent (PMD) layer specification	
G.984.3	 	02-2004	Gigabit-capable Passive Optical Networks (G-PON): Transmission convergence layer specification	Pre-published.
G.985	 	03-2003	100 Mbit/s point-to-point Ethernet based optical access system	
G.989.1	 	02-2001	Phoneline networking transceivers – Foundation	
G.989.2	 	11-2001	Phoneline networking transceivers – Payload format and link layer requirements	
G.989.3	 	03-2003	Phoneline networking transceivers – Isolation function	
G.990-G.999: Access networks				
G.991.1	 	10-1998	High bit rate digital subscriber line (HDSL) transceivers	
G.991.2	 	12-2003	Single-pair high-speed digital subscriber line (SHDSL) transceivers	Pre-published.
G.992.1	 	07-1999	Asymmetric digital subscriber line (ADSL) transceivers	
G.992.1 (1999) Corrigendum 1	 	11-2001		
G.992.1 (1999) Corrigendum 2	 	07-2002	<i>The changes introduced by this corrigendum are included in G.992.1 (1999) Amendment 1</i>	
G.992.1 (1999) Amendment 1	 	03-2003	Revised Annex C, new Annex I and new Appendix V <i>This amendment includes the changes introduced by G.992.1 (1999) Corrigendum 2</i>	
G.992.1 (1999)	 	12-2003		Pre-published.





Amendment 1 Corrigendum 1					
G.992.1 Annex H	 	10-2000	Specific requirements for a synchronized symmetrical DSL (SSDSL) system operating in the same cable binder as ISDN as defined in ITU-T G.961 Appendix III		
G.992.2	 	07-1999	Splitterless asymmetric digital subscriber line (ADSL) transceivers		
G.992.2 (1999) Corrigendum 1	 	07-2002	<i>The content of this corrigendum has been incorporated in Amendment 1 (2003)</i>		
G.992.2 (1999) Amendment 1	 	03-2003	Revised Annex C <i>This Amendment includes the modifications of Corrigendum 1 (2002)</i>		
G.992.2 (1999) Amendment 2	 	10-2003	New Appendix IV: Example overlapped PSD masks for use in a TCM-ISDN crosstalk environment		
G.992.3	 	07-2002	Asymmetric digital subscriber line transceivers 2 (ADSL2) <i>This Recommendation includes the changes introduced by Amendment 1 (2003)</i>		
G.992.3 (2002) Amendment 1	 	05-2003	<i>This amendment is not published since its content has been directly incorporated in G.992.3 (07/2002)</i>		Pre-published.
G.992.3 (2002) Corrigendum 1	 	12-2003			
G.992.3 (2002) Cor.2		02-2004			
G.992.4	 	07-2002	Splitterless asymmetric digital subscriber line transceivers 2 (splitterless ADSL2)		
G.992.5	 	05-2003	Asymmetric Digital Subscriber Line (ADSL) transceivers – Extended bandwidth ADSL2 (ADSL2+)		
G.993.1	 	11-2001	Very high speed digital subscriber line foundation		
G.993.1 (2001) Amendment 1	 	03-2003	New annex F: Regional requirements for environment coexisting with TCM-ISDN DSL as defined in Appendix III of ITU-T Recommendation G.961		
G.994.1	 	05-2003	Handshake procedures for digital subscriber line (DSL) transceivers		
G.994.1 (2003) Amendment 1	 	02-2004			Pre-published.
G.995.1	 	02-2001	Overview of digital subscriber line (DSL) Recommendations		
G.995.1 (2001) Amendment 1	 	11-2001			
G.996.1	 	02-2001	Test procedures for digital subscriber line (DSL) transceivers		
G.996.1 Erratum 1	 	01-2003			
G.996.1 (2001) Amendment 1	 	03-2003	New Annex B		
G.997.1	 	05-2003	Physical layer management for digital subscriber line (DSL) transceivers		
G.997.1 (2003) Amendment 1	 	12-2003			

G.1000-G.1999: Quality of service and performance – Generic and user-related aspects





















G.1000	 	11-2001	Communications Quality of Service: A framework and definitions		
G.1010	 	11-2001	End-user multimedia QoS categories		
G.1020	 	11-2003	Performance parameter definitions for quality of speech and other voiceband applications utilising IP networks		

G.7000-G.7999: Digital terminal equipments

G.7000-G.7099: General









G.7041/Y.1303	 	12-2003	Generic framing procedure (GFP)	
G.7042/Y.1305	 	02-2004	Link capacity adjustment scheme (LCAS) for virtual concatenated signals	Pre-published.

G.7700-G.7799: Operations, administration and maintenance features of transmission equipment









G.7710/Y.1701	 	11-2001	Common equipment management function requirements	
G.7712/Y.1703	 	03-2003	Architecture and specification of data communication network	
G.7713/Y.1704	 	12-2001	Distributed call and connection management (DCM)	
G.7713.1/Y.1704.1	 	03-2003	Distributed Call and Connection Management (DCM) based on PNNI	
G.7713.2/Y.1704.2	 	03-2003	Distributed Call and Connection Management: Signalling mechanism using GMPLS RSVP-TE	
G.7713.3/Y.1704.3	 	03-2003	Distributed Call and Connection Management: Signalling mechanism using GMPLS CR-LDP	
G.7714/Y.1705	 	11-2001	Generalized automatic discovery techniques	
G.7714.1/Y.1705.1	 	04-2003	Protocol for automatic discovery in SDH and OTN networks	
G.7715/Y.1706	 	06-2002	Architecture and requirements for routing in the automatically switched optical networks	
G.7715.1/Y.1706.1	 	02-2004	ASON routing architecture and requirements for link state protocols	

G.8000-G.8999: Digital networks







G.8000-G.8099: General aspects







G.8010/Y.1306	 	02-2004	Architecture of Ethernet layer networks	Pre-published.
G.8040/Y.1340	 	12-2003	GFP frame mapping into Plesiochronous Digital Hierarchy (PDH)	
G.8080/Y.1304	 	11-2001	Architecture for the automatically switched optical network (ASON)	
G.8080/Y.1304 (2001) Amendment 1	 	03-2003		

G.8200-G.8299: Quality and availability targets

G.8201	 	09-2003	Error performance parameters and objectives for multi-operator international paths within the Optical Transport Network (OTN)	
G.8251	 	11-2001	The control of jitter and wander within the optical transport network (OTN)	
G.8251 (2001) Corrigendum 1	 	06-2002		
G.8251 (2001) Amendment 1	 	06-2002		

G-Series: Supplements to the Series G Recommendations











G.100 Series Supplement 29	 	03-1993	Planning of mixed analogue-digital circuits (chains, connections)	
G.100 Series Supplement 31	 	03-1993	Principles of determining an impedance strategy for the local network	
G.100 Series Supplement 32	 	03-1993	Transmission aspects of digital mobile radio systems	
G Suppl. 4		12-1972	Certain methods of avoiding the transmission of excessive noise between interconnected systems	
G Suppl. 5		10-1984	Measurement of the load of telephone circuits under field conditions	
G Suppl. 7		12-1972	Loss-frequency response of channel-translating equipment used in some countries for international circuits	
G Suppl. 8		12-1972	Method proposed by the Belgian telephone administration for	

			interconnection between coaxial and symmetric pair systems	
G Suppl. 17		10-1984	Group-delay distortion performance of terminal equipment	
G Suppl. 19		10-1984	Digital crosstalk measurement (method used by the Administrations of France, the Netherlands and Spain)	
G Suppl. 22		10-1984	Mathematical models of multiplex signals	
G Suppl. 26		10-1984	Estimating the signal load margin of FDM wideband amplifier equipment and transmission systems	
G Suppl. 27		10-1984	Interference from external sources <i>This Supplement is published as G.500 series supplement in Red Book fascicle III.2 and as G.900 series supplement in Red Book fascicle III.3</i>	
G Suppl. 28		10-1984	Application of transmultiplexers, FDM codecs, data-in-voice (DIV) systems and data-over-voice (DOV) systems during the transition from an analogue to a digital network	
G Suppl. 32		11-1988	Transfer of alarm information on 60-channel transmultiplexing equipment	
G Suppl. 34		11-1988	Temperature in underground containers for the installation of repeaters	
G Suppl. 35		11-1988	Guidelines concerning the measurement of wander	
G Suppl. 36		11-1988	Jitter and wander accumulation in digital networks	
G.Sup37	 	10-1998	ITU-T Recommendation G.763 digital circuit multiplication equipment (DCME) tutorial and dimensioning	
G.Sup38	 	10-1998	Variable bit rate calculations for the ITU-T Recommendation G.767 Digital Circuit Multiplication Equipment (DCME)	
G.Sup39	 	10-2003	Optical system design and engineering considerations	Pre-published.

Series H: Audiovisual and multimedia systems

H.11		10-1984	Characteristics of circuits in the switched telephone network <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.12		10-1984	Characteristics of telephone-type leased circuits <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.14		10-1984	Characteristics of group links for the transmission of wide-spectrum signals <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.15		10-1984	Characteristics of supergroup links for the transmission of wide-spectrum signals <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.16		10-1984	Characteristics of an impulsive-noise measuring instrument for wideband data transmission <i>H.16 was an alias name of ITU-T O.72. Only this alias name was suppressed. ITU-T O.72 remains valid</i>	Withdrawn.
H.21		10-1984	Composition and terminology of international voice-frequency telegraph systems <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.22		10-1984	Transmission requirements of international voice-frequency telegraph links (at 50, 100 and 200 bauds) <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.23		10-1984	Basic characteristics of telegraph equipments used in international voice-frequency telegraph systems <i>This Recommendation was only reproducing for information some characteristics given in ITU-T R.31 and R.35</i>	Withdrawn.
H.34		10-1984	Subdivision of the frequency band of a telephone-type circuit between telegraphy and other services <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.52		10-1984	Transmission of wide-spectrum signals (data, facsimile, etc.) on wideband group links <i>Deleted after its content became technically out of date</i>	Withdrawn.
H.53		10-1984	Transmission of wide-spectrum signals (data, etc.) over wideband supergroup links <i>Deleted after its content became technically out of date</i>	Withdrawn.

H.100-H.199: Characteristics of visual telephone systems







H.100	 	11-1988	Visual telephone systems	
H.110	 	11-1988	Hypothetical reference connections for videoconferencing using primary digital group transmission	
H.120	 	03-1993	Codecs for videoconferencing using primary digital group transmission	
H.130	 	11-1988	Frame structures for use in the international interconnection of digital codecs for videoconferencing or visual telephony	
H.140	 	11-1988	A multipoint international videoconference system	













































H.200-H.499: Infrastructure of audiovisual services

H.200-H.219: General

H.200	 	03-1993	Framework for Recommendations for audiovisual services	
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H.220-H.229: Transmission multiplexing and synchronization























































H.221	 	03-2004	Frame structure for a 64 to 1920 kbit/s channel in audiovisual teleservices	Pre-published.
H.222.0	 	02-2000	Information technology – Generic coding of moving pictures and associated audio information: Systems <i>This edition of ITU-T H.222.0 consolidates H.222.0 (07/1995) and its Amendments 1 and 2 (11/1996), 3 and 4 (02/1998), 5 and 6 (05/1999), 7 (02/2000) and Corrigendum 1 (02/1998)</i>	
H.222.0	 	03-2001		

(2000) Technical Cor.1				
H.222.0 (2000) Technical Cor.2	 	03-2002		
H.222.0 (2000) Amendment 1	 	12-2002	Carriage of metadata over ITU-T Rec. H.222.0 ISO/IEC 13818-1 streams <i>This amendment includes the correction introduced by H.222.0 (2000) Amend.1/Cor.1 (2003)</i>	
H.222.0 (2000) Amend.1/Cor.1		06-2003	<i>Never published, directly consolidated in Amend.1 to H.222.0 (2000)</i>	
H.222.0 Amendment 2	 	06-2003	Support of IPMP on MPEG-2 systems	
H.222.0 (2000) Amendment 2 Erratum 1	 	02-2004	<i>Applies to English version only</i>	
H.222.0 (2000) Amendment 3	 	03-2004	Transport of AVC video data over ITU-T Rec. H.222.0 ISO/IEC 13818-1 streams	Pre-published.
H.222.1	 	03-1996	Multimedia multiplex and synchronization for audiovisual communication in ATM environments	
H.223	 	07-2001	Multiplexing protocol for low bit rate multimedia communication	
H.224	 	02-2000	A real time control protocol for simplex applications using the H.221 LSD/HSD/MLP channels	
H.225.0	 	07-2003	Call signalling protocols and media stream packetization for packet-based multimedia communication systems	
H.226	 	09-1998	Channel aggregation protocol for multilink operation on circuit-switched networks	
H.230-H.239: Systems aspects				
H.230	 	03-2004	Frame-synchronous control and indication signals for audiovisual systems	Pre-published.
H.231	 	07-1997	Multipoint control units for audiovisual systems using digital channels up to 1920 kbit/s	
H.233	 	11-2002	Confidentiality system for audiovisual services	
H.234	 	11-2002	Encryption key management and authentication system for audiovisual services	
H.235	 	08-2003	Security and encryption for H-series (H.323 and other H.245-based) multimedia terminals	
H.235 (2003) Amendment 1	 	04-2004		Pre-published.
H.239	 	07-2003	Role management and additional media channels for H.300-series terminals	
H.240-H.259: Communication procedures				
H.241	 	07-2003	Extended video procedures and control signals for H.300-series terminals <i>This edition includes the modifications introduced by H.241 (2003) Cor.1 approved on 15 March 2004</i>	
H.241 (2003) Corrigendum 1	 	03-2004	<i>This corrigendum was never published, its content having been included in the published ITU-T Rec. H.241 (07/2003)</i>	Pre-published.
H.242	 	03-2004	System for establishing communication between audiovisual terminals using digital channels up to 2 Mbit/s	Pre-published.
H.243	 	02-2000	Procedures for establishing communication between three or more audiovisual terminals using digital channels up to 1920 kbit/s	
H.243 (2000)	 	11-2000		



























Corrigendum 1

H.244	 	07-1995	Synchronized aggregation of multiple 64 or 56 kbit/s channels	
H.245	 	07-2003	Control protocol for multimedia communication	Pre-published.
H.246	 	02-1998	Interworking of H-series multimedia terminals with H-series multimedia terminals and voice/voiceband terminals on GSTN and ISDN	
H.246 Annex C	 	07-2003	ISDN User Part function – H.225.0 interworking	
H.246 Annex E1	 	11-2000	Mobile Application Part and H.225.0 interworking	
H.246 Annex E2	 	11-2000	ANSI-41 (Americas) Mobile Application Part and H.225.0 interworking	
H.246 Annex F	 	07-2001	H.323-H.324 Interworking	
H.247	 	09-1998	Multipoint extension for broadband audiovisual communication systems and terminals	
H.248.1	 	05-2002	Gateway control protocol: Version 2	
H.248.1 Corrigendum 1	 	03-2004		Pre-published.
H.248.2	 	11-2000	Gateway control protocol: Facsimile, text conversation and call discrimination packages <i>This Recommendation was first approved and published as Annex F to H.248, and then renumbered as H.248.2 on 2002-03-29 without further modification</i>	
H.248.3	 	11-2000	Gateway control protocol: User interface elements and actions packages <i>This Recommendation was first approved and published as Annex G to H.248, and then renumbered as H.248.3 on 2002-03-29 without further modification</i>	
H.248.3 (2000) Corrigendum 1	 	03-2004		
H.248.4	 	11-2000	Gateway control protocol: Transport over Stream Control Transmission Protocol (SCTP) <i>This Recommendation was first approved and published as Annex H to H.248, and then renumbered as H.248.4 on 2002-03-29 without further modification</i>	
H.248.4 (2000) Corrigendum 1	 	03-2004		
H.248.5	 	11-2000	Gateway control protocol: Transport over ATM <i>This Recommendation was first approved and published as Annex I to H.248, and then renumbered as H.248.5 on 2002-03-29 without further modification</i>	
H.248.6	 	11-2000	Gateway control protocol: Dynamic Tone Definition package <i>This Recommendation was first approved and published as Annex J to H.248, and then renumbered as H.248.6 on 2002-03-29 without further modification</i>	
H.248.7	 	03-2004	Gateway control protocol: Generic Announcement package	Pre-published.
H.248.8	 	03-2002	Gateway control protocol: Error code and service change reason description <i>The former Annex L to H.248 was renumbered as H.248.8 when revised on 2002-03-29</i>	
H.248.8 (2002) Amendment 1	 	03-2004		
H.248.9	 	03-2002	Gateway control protocol: Advanced media server packages <i>Drafted as H.248 Annex M1, renumbered and published as H.248.9</i>	
H.248.10	 	07-2001	Gateway control protocol: Media gateway resource congestion handling package <i>This Recommendation was first approved and published as Annex M2</i>	







to H.248, and then renumbered as H.248.10 on 2002-03-29 without further modification

H.248.11	 	11-2002	Gateway control protocol: Media gateway overload control package	
H.248.12	 	07-2001	Gateway control protocol: H.248.1 packages for H.323 and H.324 interworking <i>This Recommendation was first approved and published as Annex M4 to H.248, and renumbered as H.248.12 on 2002-03-29 without further modification</i>	
H.248.12 (2001) Amendment 1	 	11-2002	New Annex A: Extended H.324, H.245 command and H.245 indication packages	
H.248.13	 	03-2002	Gateway control protocol: Quality Alert Ceasing package <i>Drafted as H.248 Annex M5, renumbered and published as H.248.13</i>	
H.248.14	 	03-2002	Gateway control protocol: Inactivity timer package <i>Drafted as H.248 Annex M6, renumbered and published as H.248.14</i>	
H.248.15	 	03-2002	Gateway control protocol: SDP H.248 package attribute <i>Drafted as H.248 Annex N, renumbered and published as H.248.15</i>	
H.248.16	 	11-2002	Gateway control protocol: Enhanced digit collection packages and procedures	
H.248.16 (2002) Corrigendum 1	 	03-2004		
H.248.17	 	11-2002	Gateway control protocol: Line test packages	
H.248.17 (2002) Corrigendum 1	 	03-2004		
H.248.18	 	11-2002	Gateway control protocol: Package for support of multiple profiles	
H.248.19	 	03-2004	Gateway control protocol: Decomposed multipoint control unit, audio, video and data conferencing packages	Pre-published.
H.248.20	 	11-2002	Gateway control protocol: The use of local and remote descriptors with H.221 and H.223 multiplexing	
H.248.21	 	03-2004	Gateway control protocol: Semi-permanent connection handling package	
H.248.22	 	07-2003	Gateway control protocol: Shared Risk Group package	
H.248.22 (2003) Erratum 1	 	01-2004		
H.248.23	 	07-2003	Gateway control protocol: Enhanced Alerting packages	
H.248.23 (2003) Corrigendum 1	 	03-2004		
H.248.24	 	07-2003	Gateway control protocol: Multi-frequency tone generation and detection packages	
H.248.25	 	07-2003	Gateway control protocol: Basic CAS packages	
H.248.25 (2003) Corrigendum 1	 	03-2004		
H.248.26	 	07-2003	Gateway control protocol: Enhanced analog lines packages	
H.248.26 (2003) Corrigendum 1	 	03-2004		
H.248.27	 	07-2003	Gateway control protocol: Supplemental tones packages	
H.248.28	 	03-2004	Gateway control protocol: International CAS packages	
H.248.30	 	03-2004	Gateway control protocol: RTCP extended performance metrics packages	
H.248.31	 	04-2004	Gateway control protocol: Adaptive jitter buffer package	Pre-published.





















H.260-H.279: Coding of moving video

H.261	 	03-1993	Video codec for audiovisual services at p x 64 kbit/s	
H.262	 	02-2000	Information technology – Generic coding of moving pictures and associated audio information: Video <i>This edition of ITU-T H.262 consolidates H.262 (07/1995) and its Amendments 1 and 2 (11/1996), 3 and 4 (02/1998), 5 (05/1999), 6 (02/2000) and Corrigenda 1 and 2 (11/1996)</i>	
H.262 (2000) Technical Cor. 1	 	11-2000		
H.262 (2000) Amendment 1	 	11-2000	Content description data	
H.262 (2000) Amendment 1 Erratum 1	 	04-2002		
H.263	 	02-1998	Video coding for low bit rate communication	
H.263 Annex U	 	11-2000	Enhanced reference picture selection mode	
H.263 Annex V	 	11-2000	Data-partitioned slice mode	
H.263 Annex W	 	11-2000	Additional supplemental enhancement information specification	
H.263 Annex X	 	03-2004	Profiles and levels definition	Pre-published.
H.263 Appendix II	 	06-2001	Recommended optional enhancement	
H.263 Appendix III	 	06-2001	Examples for H.263 encoder/decoder implementations	
H.264	 	05-2003	Advanced video coding for generic audiovisual services	Pre-published.















H.280-H.299: Related systems aspects

H.281	 	11-1994	A far end camera control protocol for videoconferences using H.224	
H.282	 	05-1999	Remote device control protocol for multimedia applications	
H.283	 	05-1999	Remote device control logical channel transport	



H.300-H.349: Systems and terminal equipment for audiovisual services

H.310	 	09-1998	Broadband audiovisual communication systems and terminals	
H.320	 	03-2004	Narrow-band visual telephone systems and terminal equipment	Pre-published.
H.321	 	02-1998	Adaptation of H.320 visual telephone terminals to B-ISDN environments	
H.322	 	03-1996	Visual telephone systems and terminal equipment for local area networks which provide a guaranteed quality of service	
H.323	 	07-2003	Packet-based multimedia communications systems <i>This version 5 of H.323 integrates without further modifications Annexes M3 (07/2001), P (01/2003), Q (07/2001) and R (07/2001) that were published separately, and Annex O that was approved independently on 07/2003</i>	
H.324	 	03-2002	Terminal for low bit-rate multimedia communication	
H.324 (2002) Corrigendum 1	 	11-2002		
H.331	 	03-1993	Broadcasting type audiovisual multipoint systems and terminal equipment	
H.332	 	09-1998	H.323 extended for loosely coupled conferences	
H.341	 	05-1999	Multimedia management information base <i>This Recommendation includes one diskette containing the formal descriptions of Annexes A, B, C, D and E for the multimedia management information base.</i>	























































H.350-H.359: Directory services architecture for audiovisual and multimedia services







H.350	 	08-2003	Directory services architecture for multimedia conferencing	
H.350.1	 	08-2003	Directory services architecture for H.323	
H.350.2	 	08-2003	Directory services architecture for H.235	
H.350.3	 	08-2003	Directory services architecture for H.320	
H.350.4	 	08-2003	Directory services architecture for SIP	
H.350.5	 	08-2003	Directory services architecture for non-standard protocols	
H.350.6	 	03-2004	Directory services architecture for call forwarding and preferences	Pre-published.

H.360-H.369: Quality of service architecture for audiovisual and multimedia services

H.360	 	03-2004	An architecture for end-to-end QoS control and signalling	Pre-published.
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H.450-H.499: Supplementary services for multimedia

H.450.1	 	02-1998	Generic functional protocol for the support of supplementary services in H.323	
H.450.2	 	02-1998	Call transfer supplementary service for H.323	
H.450.3	 	02-1998	Call diversion supplementary service for H.323	
H.450.4	 	05-1999	Call hold supplementary service for H.323	
H.450.5	 	05-1999	Call park and call pickup supplementary services for H.323 <i>Covering note, May 2000: Erratum</i>	
H.450.5 Erratum 1	 	05-2000		
H.450.5 Erratum 2	 	04-2002		
H.450.6	 	05-1999	Call waiting supplementary service for H.323	
H.450.7	 	05-1999	Message waiting indication supplementary service for H.323	
H.450.8	 	02-2000	Name identification supplementary service for H.323	
H.450.9	 	11-2000	Call completion supplementary services for H.323	
H.450.10	 	03-2001	Call offering supplementary services for H.323	
H.450.11	 	03-2001	Call intrusion supplementary service for H.323	
H.450.12	 	07-2001	Common Information Additional Network Feature for H.323	
H.460.1	 	03-2002	Guidelines for the Use of the Generic Extensible Framework	
H.460.2	 	07-2001	Number Portability interworking between H.323 and SCN networks	
H.460.3	 	11-2002	Circuit maps within H.323 systems	
H.460.4	 	11-2002	Call priority designation for H.323 calls	
H.460.5	 	11-2002	H.225.0 transport of multiple Q.931 information elements of the same type	
H.460.6	 	11-2002	Extended Fast Connect feature	
H.460.7	 	11-2002	Digit maps within H.323 systems	
H.460.8	 	11-2002	Querying for alternate routes within H.323 systems	
H.460.9	 	11-2002	Support for online QoS-monitoring reporting within H.323 systems	
H.460.9 (2002) Amendment 1	 	03-2004	New Annex B – Extended performance metrics	
H.460.10	 	03-2004	Call party category within H.323 systems	Pre-published.
H.460.11	 	03-2004	Delayed call establishment within H.323 systems	Pre-published.
H.460.12	 	03-2004	Glare control indicator within H.323 systems	



H.460.13	 	03-2004	Called user release control within H.323 systems	Pre-published.
H.460.14	 	03-2004	Support for Multi-Level Precedence and Preemption (MLPP) within H.323 systems	Pre-published.
H.460.15	 	03-2004	Call signalling transport channel suspension and redirection within H.323 systems	Pre-published.

H.500-H.599: Mobility and Collaboration procedures

H.500-H.509: Overview of Mobility and Collaboration, definitions, protocols and procedures

H.501	 	03-2002	Protocol for mobility management and intra/inter-domain communication in multimedia systems
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H.510-H.519: Mobility for H-Series multimedia systems and services

H.510	 	03-2002	Mobility for H.323 multimedia systems and services
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H.530-H.539: Security for mobile multimedia systems and services



H.530	 	03-2002	Symmetric security procedures for H.323 mobility in H.510
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H.530 Corrigendum 1	 	07-2003	
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H.600-H.699: Broadband and triple-play multimedia services



H.610-H.619: Broadband multimedia services over VDSL



H.610	 	07-2003	Full-Service VDSL – System architecture and customer premises equipment
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H.611	 	07-2003	Full-Service VDSL – Operations, Administration Maintenance & Provision aspects
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H-Series: Supplements to the Series H Recommendations

H.Sup1	 	05-1999	Application profile – Sign language and lip-reading real-time conversation using low bit rate video communication <i>This Supplement includes one CD-ROM containing the video clip "Irene" to be used as test material for video coding of sign language.</i>
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H.Sup2	 	01-2004	H.248.x sub-series packages guide – Release 5
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H.Sup3	 	05-2003	Operator requirements for full service VDSL in ITU-T Recommendations H.610 and H.611
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H.Sup4	 	01-2004	Repository of generic parameters for the ITU-T Recommendations H.460.x sub-series
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Series I: Integrated services digital network

I.100-I.199: General structure



I.110-I.119: Terminology

I.110		11-1988	Preamble and general structure of the I-Series Recommendations for the integrated services digital network (ISDN) <i>Deleted after its content became technically out of date</i>	Withdrawn.
I.111		11-1988	Relationship with other Recommendations relevant to ISDNs <i>Deleted after its content became technically out of date</i>	Withdrawn.
I.112	 	03-1993	Vocabulary of terms for ISDNs	
I.112 Appendix I	 	02-2002	General telecommunication terminology and definitions	
I.113	 	06-1997	Vocabulary of terms for broadband aspects of ISDN	
I.114	 	03-1993	Vocabulary of terms for universal personal telecommunication	





I.120-I.129: Description of ISDNs

I.120	 	03-1993	Integrated services digital networks (ISDNs)	
I.121	 	04-1991	Broadband aspects of ISDN	
I.122	 	03-1993	Framework for frame mode bearer services	



I.130-I.139: General modelling methods

I.130	 	11-1988	Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN	
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I.140-I.149: Telecommunication network and service attributes


I.140	 	03-1993	Attribute technique for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN	
I.141	 	11-1988	ISDN network charging capabilities attributes	

I.150-I.199: General description of asynchronous transfer mode





I.150	 	02-1999	B-ISDN asynchronous transfer mode functional characteristics	
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I.200-I.299: Service capabilities





I.200-I.209: Scope

I.200	 	11-1988	Guidance to the I.200-series of Recommendations	
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I.210-I.219: General aspects of services in ISDN

I.210	 	03-1993	Principles of telecommunication services supported by an ISDN and the means to describe them	
I.211	 	03-1993	B-ISDN service aspects	





















I.220-I.229: Common aspects of services in the ISDN

I.220	 	11-1988	Common dynamic description of basic telecommunication services	
I.221	 	03-1993	Common specific characteristics of services	





I.230-I.239: Bearer services supported by an ISDN

I.230	 	11-1988	Definition of bearer service categories	
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I.231 Circuit-mode bearer service categories

I.231.1	 	11-1988	Circuit-mode 64 kbit/s unrestricted, 8 kHz structured bearer service	
I.231.2	 	11-1988	Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for speech information transfer	
I.231.3	 	11-1988	Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for 3.1 kHz audio information transfer	
I.231.4	 	11-1988	Circuit-mode, alternate speech / 64 kbit/s unrestricted, 8 kHz structured bearer service	
I.231.5	 	11-1988	Circuit-mode 2 x 64 kbit/s unrestricted, 8 kHz structured bearer service	
I.231.6	 	07-1996	Circuit-mode 384 kbit/s unrestricted, 8 kHz structured bearer service	
I.231.7	 	07-1996	Circuit-mode 1536 kbit/s unrestricted, 8 kHz structured bearer service	
I.231.8	 	07-1996	Circuit-mode 1920 kbit/s unrestricted, 8 kHz structured bearer service	
I.231.9	 	03-1993	Circuit-mode 64 kbit/s 8 kHz structured multi-use bearer service	
I.231.10	 	08-1992	Circuit-mode multiple-rate unrestricted 8 kHz structured bearer service	

I.232 Packet-mode bearer services categories

I.232.1	 	11-1988	Virtual call and permanent virtual circuit bearer service category	
I.232.2		11-1988	Connectionless bearer service category <i>Empty Recommendation. This service has only been identified and requires further study</i>	
I.232.3	 	03-1993	User signalling bearer service category (USBS)	

















I.233 Frame mode bearer services

I.233.1	 	10-1991	ISDN frame relaying bearer service <i>Published with ITU-T I.233.2</i>	
I.233.1 Annex F	 	07-1996	Frame relay multicast	
I.233.2	 	10-1991	ISDN frame switching bearer service <i>Published with ITU-T I.233.1</i>	


I.240-I.249: Teleservices supported by an ISDN

I.240	 	11-1988	Definition of teleservices	
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I.241 Teleservices supported by an ISDN















I.241.1	 	11-1988	Telephony	
I.241.2	 	11-1988	Teletex	
I.241.3	 	11-1988	Telefax 4	
I.241.4	 	11-1988	Mixed mode	
I.241.5	 	11-1988	Videotex	
I.241.6	 	11-1988	Telex	
I.241.7	 	03-1993	Telephony 7 kHz teleservice	
I.241.8	 	10-1995	Teleaction stage one service description	

I.250-I.299: Supplementary services in ISDN















I.250	 	11-1988	Definition of supplementary services	
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I.251 Number identification supplementary services









I.251.1		08-1992	Direct-dialling-In	Available only in PDF.
I.251.2	 	08-1992	Multiple Subscriber Number	
I.251.3	 	08-1992	Calling Line Identification Presentation	

I.251.4	 	08-1992	Calling Line Identification Restriction
I.251.5	 	02-1995	Connected Line Identification Presentation (COLP)
I.251.6	 	02-1995	Connected Line Identification Restriction (COLR)
I.251.7	 	08-1992	Malicious call Identification
I.251.8	 	08-1992	Sub-addressing supplementary service
I.251.9	 	07-1996	Calling name identification presentation
I.251.10	 	07-1996	Calling name identification restriction








I.252 Call offering supplementary services

I.252.1	 	11-1988	Call Transfer
I.252.2	 	08-1992	Call Forwarding Busy
I.252.3	 	08-1992	Call Forwarding No Reply
I.252.4	 	08-1992	Call Forwarding Unconditional
I.252.5	 	08-1992	Call Deflection
I.252.6	 	11-1988	Line Hunting (LH)
I.252.7	 	05-1997	Explicit call transfer











I.253 Call completion supplementary services

I.253.1	 	11-1988	Call waiting (CW) supplementary service
I.253.2	 	08-1992	Call Hold
I.253.3	 	07-1996	Completion of calls to busy subscribers
I.253.4	 	07-1996	Completion of calls on no reply









I.254 Multiparty supplementary services

I.254.1	  	11-1988	Conference calling (CONF)
I.254.2	 	08-1992	Three-Party Supplementary Service
I.254.5	 	05-1997	Meet-me conference



I.255 Community of interest supplementary services

I.255.1	 	08-1992	Closed User Group
I.255.2	 	07-1996	Support of Private Numbering Plans
I.255.3	 	07-1990	Multi-level precedence and preemption service (MLPP)
I.255.4	 	07-1990	Priority service
I.255.5	 	08-1992	Outgoing call barring



I.256 Charging supplementary services



I.256.1		11-1988	Credit card calling (CRED) <i>Empty Recommendation. This subject has only been identified and is left for further study</i>
I.256.2a	 	03-1993	Advice of charge: charging information at call set-up time (AOC-S)
I.256.2b	 	03-1993	Advice of charge: charging information during the call (AOC-D)
I.256.2c	 	03-1993	Advice of charge: charging information at the end of the call (AOC-E)
I.256.3	 	08-1992	Reverse charging

I.257 Additional information transfer supplementary services


I.257.1	 	10-1995	User-to-User Signalling (UUS)
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I.258 Mobility and modification supplementary services

I.258.1	 	10-1995	Terminal portability (TP)
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

I.258.2	 	02-1995	In-call modification (IM)	
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I.259 Screening supplementary services



















I.259.1	 	07-1996	Address screening (ADS)	
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I.300-I.399: Overall network aspects and functions

















I.310-I.319: Network functional principles

I.310	 	03-1993	ISDN – Network functional principles	
I.311	 	08-1996	B-ISDN general network aspects	
I.311 (1996) Amendment 1	 	03-2000		
I.312/Q.1201	 	10-1992	Principles of intelligent network architecture <i>This Recommendation is published with the double number Q.1201 and I.312</i>	
I.313	 	09-1997	B-ISDN network requirements	

I.320-I.329: Reference models

I.320	 	11-1993	ISDN protocol reference model	
I.321	 	04-1991	B-ISDN protocol reference model and its application <i>Covering note, May 2000: Erratum</i>	
I.322	 	02-1999	Generic protocol reference model for telecommunication networks	
I.324	 	10-1991	ISDN network architecture	
I.325	 	03-1993	Reference configurations for ISDN connection types	
I.326		11-1988	Reference configuration for relative network resource requirements <i>Deleted after its content became technically out of date</i>	Withdrawn.
I.326	 	03-2003	Functional architecture of transport networks based on ATM	
I.327	 	03-1993	B-ISDN functional architecture	
I.328/Q.1202	 	09-1997	Intelligent network – Service plane architecture <i>This Recommendation is published with the double number Q.1202 and I.328</i>	
I.329/Q.1203	 	09-1997	Intelligent network – Global functional plane architecture <i>This Recommendation is published with the double number Q.1203 and I.329. For more details see I.329</i>	























I.330-I.339: Numbering, addressing and routing

I.330	 	11-1988	ISDN numbering and addressing principles	
I.331	 	05-1997	The international public telecommunication numbering plan <i>This Recommendation is published under alias number E.164</i>	
E.164 Supplement 1	 	03-1998	Alternatives for carrier selection and network identification	
E.164 Supplement 2	 	11-1998	Number Portability	
E.164 Supplement 3	 	05-2002	Operational and administrative issues associated with national implementations of the ENUM functions	
E.164 Supplement 4	 	05-2003	Operational and administrative issues associated with the implementation of ENUM for non-geographic country codes	
I.333	 	03-1993	Terminal selection in ISDN	
I.334	 	11-1988	Principles relating ISDN numbers/sub-addresses to the OSI reference model network layer addresses	





I.340-I.349: Connection types

I.340	 	11-1988	ISDN connection types	
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I.350-I.359: Performance objectives

I.350	 	03-1993	General aspects of quality of service and network performance in digital networks, including ISDNs	
I.351/Y.801/Y.1501	 	10-2000	Relationships among ISDN, Internet protocol, and GII performance recommendations	
I.352	 	03-1993	Network performance objectives for connection processing delays in an ISDN	
I.353	 	08-1996	Reference events for defining ISDN and B-ISDN performance parameters	
I.354	 	03-1993	Network performance objectives for packet-mode communication in an ISDN	
I.355	 	10-2000	ISDN 64 kbit/s connection type availability performance	
I.356	 	03-2000	B-ISDN ATM layer cell transfer performance	
I.356 (2000) Amendment 1	 	02-2004	New Appendix V – Support of Y.1541 QoS classes 0 and 2 in ATM-based networks	
I.357	 	11-2000	B-ISDN semi-permanent connection availability	
I.358	 	09-2003	Call processing performance for switched virtual channel connections (VCCs) in a B-ISDN	
I.359	 	02-1999	Accuracy and dependability of ISDN 64 kbit/s circuit-mode connection types	















I.360-I.369: Protocol layer requirements

I.361	 	02-1999	B-ISDN ATM layer specification	
I.362	 	03-1993	<i>B-ISDN ATM adaptation layer (AAL) functional description Deleted, since the service classes defined therein were no longer appropriate and were in conflict with F-Series Recommendations</i>	Withdrawn.









I.363 B-ISDN ATM Adaptation Layer specification



I.363.1	 	08-1996	Type 1 AAL	
I.363.2	 	11-2000	Type 2 AAL	
I.363.3	 	08-1996	Type 3/4 AAL	
I.363.5	 	08-1996	Type 5 AAL	
I.364	 	02-1999	Support of the broadband connectionless data bearer service by the B-ISDN	

I.365 B-ISDN ATM adaptation layer sublayers

















I.365.1	 	11-1993	Frame relaying service specific convergence sublayer (FR-SSCS)	
I.365.2	 	11-1995	Service-specific coordination function to provide the connection-oriented network service	
I.365.3	 	11-1995	Service-specific coordination function to provide the connection-oriented transport service	
I.365.4	 	08-1996	Service-specific convergence sublayer for HDLC applications	
I.366.1	 	06-1998	Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL type 2	
I.366.2	 	11-2000	AAL type 2 service specific convergence sublayer for narrow-band services	
I.366.2 (2000) Corrigendum 1	 	03-2002		

I.370-I.399: General network requirements and functions











I.370	 	10-1991	Congestion management for the ISDN frame relaying bearer service	
I.371	 	03-2004	Traffic control and congestion control in B-ISDN	Pre-published.
I.371.1	 	11-2000	Guaranteed frame rate ATM transfer capability	
I.372	 	03-1993	Frame relaying bearer service network-to-network interface requirements	

I.373	 	03-1993	Network capabilities to support universal personal telecommunication (UPT)	
I.374		03-1993	Framework Recommendation on "network capabilities to support multimedia services" <i>Replaced by ITU-T I.375.1 and ITU-T I.375.2</i>	Withdrawn.





I.375 Network capabilities to support multimedia services

I.375.1	 	06-1998	General aspects	
I.375.2	 	06-1998	Example of multimedia retrieval service class – Video-on-demand service using an ATM-based network	
I.375.3	 	03-2000	Example of multimedia distribution service class – Switched digital broadcasting	
I.376	 	03-1995	ISDN network capabilities for the support of the teleaction service	
I.377	 	10-2000	Network requirements to support charging and accounting in B-ISDN	
I.378	 	12-2002	Traffic control and congestion control at the ATM Adaptation Layer type 2	
I.378 (2002) Amendment 1	 	08-2003	New Appendix IV: Deriving AAL 2 traffic parameters from AAL 2 link characteristics	
I.381	 	03-2001	ATM adaptation layer (AAL) Performance	







I.400-I.499: ISDN user-network interfaces

I.410	 	11-1988	General aspects and principles relating to Recommendations on ISDN user-network interfaces	
I.411	 	03-1993	ISDN user-network interfaces – Reference configurations	
I.412	 	11-1988	ISDN user-network interfaces – Interface structures and access capabilities	
I.413	 	03-1993	B-ISDN user-network interface	
I.414	 	09-1997	Overview of Recommendations on layer 1 for ISDN and B-ISDN customer accesses	











I.420-I.429: Application of I-series Recommendations to ISDN user-network interfaces

I.420	 	11-1988	Basic user-network interface	
I.421	 	11-1988	Primary rate user-network interface	



I.430-I.439: Layer 1 Recommendations

I.430	 	11-1995	Basic user-network interface – Layer 1 specification	
I.431	 	03-1993	Primary rate user-network interface – Layer 1 specification	
I.431 (1993) Amendment 1	 	06-1997		
I.432		03-1993	B-ISDN user-network interface – Physical layer specification <i>This Recommendation was subdivided into ITU-T Recs. I.432.1 to I.432.5 when revised in 1996</i>	Withdrawn.







I.432 B-ISDN user-network interface – Physical layer specification

I.432.1	 	02-1999	General characteristics	
I.432.2	 	02-1999	155 520 kbit/s and 622 080 kbit/s operation	
I.432.3	 	02-1999	1544 kbit/s and 2048 kbit/s operation	
I.432.4	 	02-1999	51 840 kbit/s operation	
I.432.5	 	06-1997	25 600 kbit/s operation	









I.440-I.449: Layer 2 Recommendations

Q.920	 	03-1993	ISDN user-network interface data link layer – General aspects <i>This Recommendation is also included but not published in I series</i>	
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under alias number I.440

Q.920 (1993) Amendment 1	 	06-2000	
Q.921	 	09-1997	ISDN user-network interface – Data link layer specification <i>This Recommendation is also included but not published in I series under alias number I.441.</i>
Q.921 (1997) Amendment 1	 	06-2000	





I.450-I.459: Layer 3 Recommendations

Q.930	 	03-1993	ISDN user-network interface layer 3 – General aspects <i>This Recommendation is also included but not published in I series under alias number I.450</i>
Q.931	 	05-1998	ISDN user-network interface layer 3 specification for basic call control <i>This Recommendation is also included but not published in I series under alias number I.451</i>
Q.931 (1998) Amendment 1	 	12-2002	Extensions for the support of digital multiplexing equipment
Q.931 (1998) Erratum 1	 	02-2003	















I.460-I.469: Multiplexing, rate adaption and support of existing interfaces





















I.460	 	02-1999	Multiplexing, rate adaption and support of existing interfaces
X.30	 	03-1993	Support of X.21, X.21 bis and X.20 bis based Data Terminal Equipments (DTEs) by an Integrated Services Digital Network (ISDN) <i>This Recommendation is also included but not published in I series under alias number I.461</i>
X.31	 	11-1995	Support of packet mode terminal equipment by an ISDN <i>This Recommendation is also included but not published in I series under alias number I.462</i>
V.110	 	02-2000	Support by an ISDN of data terminal equipments with V-series type interfaces <i>This Recommendation is also included but not published in I Series under alias number I.463.</i>
I.464	 	02-1999	Multiplexing, rate adaption and support of existing interfaces for restricted 64 kbit/s transfer capability
V.120	 	10-1996	Support by an ISDN of data terminal equipment with V-series type interfaces with provision for statistical multiplexing <i>This Recommendation is also included but not published in I series under alias number I.465</i>
V.120 (1996) Corrigendum 1	 	05-1999	

I.470-I.499: Aspects of ISDN affecting terminal requirements

















I.470	 	11-1988	Relationship of terminal functions to ISDN
I.480	 	03-2000	1+1 protection switching for cell-based physical layer

I.500-I.599: Internetwork interfaces

I.500	 	03-1993	General structure of the ISDN interworking Recommendations
I.501	 	03-1993	Service interworking
I.510	 	03-1993	Definitions and general principles for ISDN interworking
I.511	 	11-1988	ISDN-to-ISDN layer 1 internetwork interface
I.515	 	03-1993	Parameter exchange for ISDN interworking
I.520	 	03-1993	General arrangements for network interworking between ISDNs
I.525	 	08-1996	Interworking between networks operating at bit rates less than 64 kbit/s with 64 kbit/s-based ISDN and B-ISDN





I.530	 	03-1993	Network interworking between an ISDN and a public switched telephone network (PSTN)
X.321	 	10-1996	General arrangements for interworking between Circuit-Switched Public Data Networks (CSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services <i>This Recommendation is also included but not published in I series under alias number I.540</i>
X.325	 	10-1996	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services <i>This Recommendation is also included but not published in I series under alias number I.550</i>
I.555	 	09-1997	Frame Relaying Bearer Service interworking
U.202	 	03-1993	Technical requirements to be met in providing the international telex service within an integrated services digital network <i>This Recommendation is also included but not published in I series under alias number I.560</i>
I.570	 	03-1993	Public/private ISDN interworking
I.571	 	08-1996	Connection of VSAT based private networks to the public ISDN
I.572	 	03-2000	VSAT interconnection with the PSTN
I.580	 	11-1995	General arrangements for interworking between B-ISDN and 64 kbit/s based ISDN
I.581	 	09-1997	General arrangements for B-ISDN interworking

I.600-I.699: Maintenance principles



I.601	 	11-1988	General maintenance principles of ISDN subscriber access and subscriber installation
I.610	 	02-1999	B-ISDN operation and maintenance principles and functions
I.610 (1999) Corrigendum 1	 	03-2000	
I.610 (1999) Amendment 1	 	03-2000	
I.620	 	10-1996	Frame relay operation and maintenance principles and functions
I.630	 	02-1999	ATM protection switching
I.630 (1999) Corrigendum 1	 	03-2000	
I.630 (1999) Amendment 1	 	03-2000	

I.700-I.799: B-ISDN equipment aspects



I.730-I.739: ATM equipment

I.731	 	10-2000	Types and general characteristics of ATM equipment
I.732	 	10-2000	Functional characteristics of ATM equipment



I.740-I.749: Transport functions



I.741	 	07-1999	Interworking and interconnection between ATM and switched telephone networks for the transmission of speech, voiceband data and audio signals
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I.750-I.759: Management of ATM equipment

I.751	 	03-1996	Asynchronous transfer mode management of the network element view
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I.760-I.769: Multiplexing aspects

I.761   03-2000 Inverse multiplexing for ATM (IMA)



I.762   03-2000 ATM over fractional physical links

I-Series: Supplements to the Series I Recommendations



















I.Sup1   03-1998 Generic service descriptions for ten supplementary services defined in I.250-Series Recommendations

Series J: Cable networks and transmission of television, sound programme and other multimedia signals













J.1-J.9: General Recommendations

J.1		09-1999	Terms, definitions and acronyms applicable to the transmission of television and sound-programme signals and of related data signals <i>This Recommendation was deleted on 20 Septembre 2002</i>	Withdrawn.
J.2	 	09-1999	Guidelines on the use of some ITU-T Recommendations in the J series	

J.10-J.19: General specifications for analogue sound-programme transmission

J.11	 	11-1988	Hypothetical reference circuits for sound-programme transmissions <i>Formerly ITU-R Rec. CMTT 502-2</i>	
J.12	 	11-1988	Types of sound-programme circuits established over the international telephone network	
J.13	 	11-1988	Definitions for international sound-programme circuits	
J.14	 	11-1988	Relative levels and impedances on an international sound-programme connection	
J.15	 	11-1988	Lining-up and monitoring an international sound-programme connection	
J.16	 	11-1988	Measurement of weighted noise in sound-programme circuits	
J.17	 	11-1988	Pre-emphasis used on sound-programme circuits	
J.18	 	11-1988	Crosstalk in sound-programme circuits set up on carrier systems	
J.19	 	11-1988	A conventional test signal simulating sound-programme signals for measuring interference in other channels <i>Formerly ITU-R Rec. CMTT 571-2</i>	

J.20-J.29: Performance characteristics of analogue sound-programme circuits

J.21	 	08-1994	Performance characteristics of 15 kHz-type sound-programme circuits – Circuits for high quality monophonic and stereophonic transmissions <i>Formerly ITU-R Rec. CMTT 505-5</i>	
J.22		10-1984	Performance characteristics of 10 kHz type sound-programme circuits <i>Deleted after its content became technically out of date</i>	Withdrawn.
J.23	 	11-1988	Performance characteristics of 7 kHz type (narrow bandwidth) sound-programme circuits <i>Formerly ITU-R Rec. CMTT 503-4</i>	
J.24	 	02-1982	Modulation of signals carried by sound-programme circuits by interfering signals from power supply sources <i>Published as ITU-R Rec. CMTT 474-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.25	 	05-1986	Estimation of transmission performance of sound-programme circuits shorter or longer than the hypothetical reference circuit <i>Published as ITU-R Rec. CMTT 605-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.26	 	06-1990	Test signals to be used on international sound-programme connections <i>Published as ITU-R Rec. CMTT 645-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.27	 	06-1990	Signals for the alignment of international sound-programme connections <i>Published as ITU-R Rec. CMTT 661-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	





J.30-J.39: Equipment and lines used for analogue sound-programme circuits

J.31		11-1988	Characteristics of equipment and lines used for setting up 15 kHz type sound-programme circuits <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.32		10-1984	Characteristics of equipment and lines used for setting up 10 kHz type sound-programme circuits	Withdrawn.















Deleted after its content became technically out of date

J.33			11-1988	Characteristics of equipment and lines used for setting up 6.4 kHz type sound-programme circuits <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.34			11-1988	Characteristics of equipment used for setting up 7 kHz type sound-programme circuits <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.




J.40-J.49: Digital encoders for analogue sound-programme signals













J.41	 		11-1988	Characteristics of equipment for the coding of analogue high quality sound programme signals for transmission on 384 kbit/s channels	
J.42	 		11-1988	Characteristics of equipment for the coding of analogue medium quality sound-programme signals for transmission on 384-kbit/s channels	
J.43			11-1988	Characteristics of equipment for the coding of analogue high quality sound programme signals for transmission on 320 kbit/s channels <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.44			11-1988	Characteristics of equipment for the coding of analogue medium quality sound-programme signals for transmission on 320 kbit/s channels <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.

J.50-J.59: Digital transmission of sound-programme signals

J.51	 		08-1994	General principles and user requirements for the digital transmission of high quality sound programmes <i>Formerly ITU-R Rec. CMTT 659-1</i>	
J.52	 		07-1996	Digital transmission of high-quality sound-programme signals using one, two or three 64 kbit/s channels per mono signal (and up to six per stereo signal)	
J.52 (1996) Amendment 1	 		09-1999	New Appendix II – Extracts from EBU specification of an ISDN Codec capable of delivering high-quality audio	
J.53	 		05-2000	Sampling frequencies to be used for the digital transmission of studio-quality and high-quality sound-programme signals	
J.54	 		05-1986	Transmission of analogue high-quality sound-programme signals on mixed analogue-and-digital circuits using 384 kbit/s channels <i>Published as ITU-R Rec. CMTT 660 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.55	 		06-1990	Digital transmission of high-quality sound-programme signals on distribution circuits using 480 kbit/s (496 kbit/s) per audio channel <i>Published as ITU-R Rec. CMTT 718 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.56			06-1990	Transmission of high-quality sound-programme analogue signals over mixed analogue/digital circuits at 320 kbit/s <i>Was published as ITU-R Rec. CMTT 719 in CCIR Recommendations, Volume XII, Düsseldorf, 1990. Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.57	 		06-1990	Transmission of digital studio quality sound signals over H1 channels <i>Published as ITU-R Rec. CMTT 724 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	

J.60-J.69: Circuits for analogue television transmission

















J.61			06-1990	Transmission performance of television circuits designed for use in international connections <i>Published as ITU-R Rec. CMTT 567-3 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	Available only in PDF.
J.62	 		02-1978	Single value of the signal-to-noise ratio for all television systems <i>Published as ITU-R Rec. CMTT 568 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	













J.63	 	06-1990	Insertion of test signals in the field-blanking interval of monochrome and colour television signals <i>Published as ITU-R Rec. CMTT 473-5 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.64	 	02-1986	Definitions of parameters for simplified automatic measurement of television insertion test signals <i>Published as ITU-R Rec. CMTT 569-2 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.65	 	02-1978	Standard test signal for conventional loading of a television channel <i>Published as ITU-R Rec. CMTT 570 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.66	 	02-1978	Transmission of one sound programme associated with analogue television signal by means of time division multiplex in the line synchronizing pulse <i>Published as ITU-R Rec. CMTT 572 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.67	 	03-2001	Test signals and measurement techniques for transmission circuits carrying MAC/packet signals	
J.68	 	02-1982	Hypothetical reference chain for television transmissions over very long distances <i>Published as ITU-R Rec. CMTT 603 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	

J.70-J.79: Analogue television transmission over metallic lines and interconnection with radio-relay links























J.73		11-1988	Use of a 12-MHz system for the simultaneous transmission of telephony and television <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.74		11-1988	Methods for measuring the transmission characteristics of translating equipments <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.75		11-1988	Interconnection of systems for television transmission on coaxial pairs and on radio-relay links <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
J.77		11-1988	Characteristics of the television signals transmitted over 18 MHz and 60-MHz systems <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.

J.80-J.89: Digital transmission of television signals





J.80	 	09-1993	Transmission of component-coded digital television signals for contribution-quality applications at bit rates near 140 Mbit/s <i>Formerly ITU-R Rec. CMTT 721-2</i>	
J.81	 	09-1993	Transmission of component-coded digital television signals for contribution-quality applications at the third hierarchical level of ITU-T Recommendation G.702 <i>Formerly ITU-R Rec. CMTT.723-1</i>	
J.81 (1993) Amendment 1	 	10-1995	Appendix II to Annex A to Recommendation J.81 – Guidelines for implementation of a complete television codec	
J.81 (1993) Corrigendum 1	 	10-1996		
J.81 (1993) Amendment 2	 	03-1998	Appendix IV to Annex A – Results of 34 Mbit/s codec interworking tests (February 1996)	
J.82	 	07-1996	Transport of MPEG-2 constant bit rate television signals in B-ISDN	
J.83	 	04-1997	Digital multi-programme systems for television, sound and data services for cable distribution <i>Covering note, 3.08.1998: Corrigendum</i>	
J.83 (1997)	 	07-1998		

Erratum 1				
J.84	 	03-2001	Distribution of digital multi-programme signals for television, sound and data services through SMATV networks	
J.85	 	06-1990	Digital television transmission over long distances – General principles <i>Published as ITU-R Rec. CMTT 604-2 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.86	 	06-1990	Mixed analogue-and-digital transmission of analogue composite television signals over long distances <i>Published as ITU-R Rec. CMTT 658-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.87	 	03-2001	Use of hybrid cable television links for the secondary distribution of television into the user's premises	
J.88	 	09-1999	Transmission of enhanced definition television signals over digital links	
J.89	 	09-1999	Transport Mechanism for component-coded digital television signals using MPEG-2 4:2:2 P@ML including all service elements for contribution and primary distribution	







J.90-J.99: Ancillary digital services for television transmission



































J.90	 	05-2000	Electronic programme guides for delivery by digital cable television and similar methods – Reference operating scenario and requirements	
J.91	 	08-1994	Technical methods for ensuring privacy in long-distance international television transmission	
J.92	 	04-1997	Recommended operating guidelines for point-to-point transmission of television programmes	
J.93	 	03-1998	Requirements for conditional access in the secondary distribution of digital television on cable television systems	
J.94	 	11-1998	Service information for digital broadcasting in cable television systems	
J.94 (1998) Amendment 1	 	10-2000	Annex B – Service information delivered out of band for digital cable television systems	
J.94 (1998) Amendment 2	 	03-2001	Revised Annex C – Service information for digital multi-programme System C	
J.95	 	09-1999	Copy protection of intellectual property for content delivered on cable television systems	
J.96	 	07-2002	Technical method for ensuring privacy in long-distance international MPEG-2 television transmission conforming to ITU-T Recommendation J.89	
J.97	 	07-2002	Metadata on cable networks	
J.98	 	05-2003	Metadata requirements for video-on-demand in cable networks	

J.100-J.109: Operational requirements and methods for television transmission







J.100	 	06-1990	Tolerances for transmission time differences between the vision and sound components of a television signal <i>Published as ITU-R Rec. CMTT 717 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	
J.101	 	06-1990	Measurement methods and test procedures for teletext signals <i>Published as ITU-R Rec. CMTT 720 in CCIR Recommendations, Volume XII, Düsseldorf, 1990</i>	

J.110-J.129: Interactive systems for digital television distribution





















J.110	 	04-1997	Basic principles for a worldwide common family of systems for the provision of interactive television services	
J.111	 	03-1998	Network independent protocols for interactive systems <i>Guidelines for the implementation of Rec. J.111 may be found in Supplement 3 to J series (1998).</i>	
J.112	 	03-1998	Transmission systems for interactive cable television services <i>Example of linking options between annexes of Rec. J.112 and annexes of Rec. J.83 may be found in Supplement 1 to J series (1998). Guidelines for the implementation of annex A of Rec. J.112 may be found in Supplement 2 to J series (1998).</i>	

J.112 Annex A	 	03-2001	Digital Video Broadcasting: DVB interaction channel for Cable TV (CATV) distribution systems	
J.112 Annex B	 	03-2004	Data-over-cable service interface specifications: Radio-frequency interface specification	Pre-published.
J.112 Annex C	 	02-2002	Data-over-cable service interface specifications: Radio-frequency interface specification using QAM technique	
J.113	 	03-1998	Digital video broadcasting interaction channel through the PSTN/ISDN	
J.114	 	09-1999	Interaction channel using digital enhanced cordless telecommunications	
J.115	 	09-1999	Interaction channel using the global system for mobile communications	
J.116	 	05-2000	Interaction channel for local multipoint distribution systems	
J.117	  	09-1999	Home digital network interface specification	
J.118	 	05-2000	Access systems for interactive services on SMATV/MATV networks	
J.120	  	05-2000	Distribution of sound and television programs over the IP network	
J.121	 	02-2002	Quality control protocol for webcasting	
J.122	 	12-2002	Second-generation transmission systems for interactive cable television services – IP cable modems	
J.123	 	07-2002	Multiplexing format for webcasting on the TCP/IP network	
J.124	 	03-2004	Multiplexing format for multimedia webcasting over TCP/IP networks	Pre-published.
J.125	 	04-2004	Link privacy for cable modem implementations	Pre-published.
J.126	 	04-2004	Embedded CableModem device specification	Pre-published.





J.130-J.139: Transport of MPEG-2 signals on packetized networks

































































J.131	 	03-1998	Transport of MPEG-2 signals in PDH networks	
J.132	 	03-1998	Transport of MPEG-2 signals in SDH networks	
J.133	 	07-2002	Measurement of MPEG-2 transport streams in networks	









J.140-J.149: Measurement of the quality of service

J.140	 	03-1998	Subjective picture quality assessment for digital cable television systems	
J.141	 	09-1999	Performance indicators for data services delivered over digital cable television systems	
J.142	 	05-2000	Methods for the measurement of parameters in the transmission of digital cable television signals	
J.143	 	05-2000	User requirements for objective perceptual video quality measurements in digital cable television	
J.144	 	03-2004	Objective perceptual video quality measurement techniques for digital cable television in the presence of a full reference	Pre-published.
J.145	 	03-2001	Measurement and control of the quality of service for sound transmission over contribution and distribution networks	
J.146	 	07-2002	Loop latency issues in contribution circuits for conversational TV programmes	
J.147	 	07-2002	Objective picture quality measurement method by use of in-service test signals	
J.148	 	05-2003	Requirements for an objective perceptual multimedia quality model	
J.149	 	03-2004	Method for specifying accuracy and cross-calibration of Video Quality Metrics (VQM)	Pre-published.







J.150-J.159: Digital television distribution through local subscriber networks

J.150	 	03-1998	Operational functionalities for the delivery of digital multiprogramme television, sound and data services through multichannel, multipoint distribution systems (MMDS)	
J.150 (1998)	 	09-1999	Additions to Recommendation J.150 to also encompass local multipoint	





Amendment 1			distribution systems (LMDS)	
J.150 (1998) Amendment 2	 	03-2001		
J.151	 	10-2000	RF remodulator interface for digital television	
J.160-J.179: IPCablecom				
J.160	 	02-2002	Architectural framework for the delivery of time-critical services over cable television networks using cable modems	
J.161	 	03-2001	Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems	
J.162	 	03-2004	Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems	Pre-published.
J.163	 	03-2004	Dynamic quality of service for the provision of real-time services over cable television networks using cable modems	Pre-published.
J.164	 	03-2001	Event message requirements for the support of real-time services over cable television networks using cable modems	
J.165	 	05-2003	IPCablecom Internet signalling transport protocol (ISTP)	
J.166	 	03-2001	IPCablecom Management Information Base (MIB) framework	
J.167	 	03-2001	Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable modems	
J.168	 	03-2001	IPCablecom Media Terminal Adapter (MTA) MIB requirements	
J.169	 	03-2001	IPCablecom network call signalling (NCS) MIB requirements	
J.170	 	02-2002	IPCablecom security specification	Pre-published.
J.171	 	02-2002	IPCablecom Trunking Gateway Control Protocol (TGCP)	
J.171 (2002) Amendment 1	 	05-2003	TGCP Profile 2	
J.172	 	02-2002	IPCablecom management event mechanism	
J.173	 	02-2002	IPCablecom embedded MTA primary line support	
J.174	 	02-2002	IPCablecom interdomain quality of service	
J.175	 	07-2002	Audio server protocol	
J.176	 	07-2002	IPCablecom management event mechanism MIB	
J.177	 	05-2003	IPCablecom CMS subscriber provisioning specification	
J.178	 	05-2003	IPCablecom CMS to CMS signalling	Pre-published.
J.179	 	04-2004	IPCablecom support for multimedia	Pre-published.
J.180-J.189: Digital transmission of television signals				
J.180	 	05-2000	User requirements for statistical multiplexing of several programmes on a transmission channel	
J.181	 	03-2001	Digital Program Insertion cueing message for cable television systems	
J.181 (2001) Amendment 1	 	04-2003	New Appendix I: Recommended practices and interpretation guide	
J.182	 	03-2001	Parameter sets for analogue interface specifications for the interconnection of set-top boxes and presentation devices in the home	
J.183	 	03-2001	Time-division multiplexing of multiple MPEG-2 transport streams over cable television systems	
J.184	 	03-2001	Digital broadband delivery system: Out-of-band transport	
J.185	 	02-2002	Transmission equipment for transferring multi-channel television signals over optical access networks by FM conversion	
J.186	 	02-2002	Transmission equipment for multi-channel television signals over optical access networks by sub-carrier multiplexing (SCM)	
J.187	 	07-2002	Transport mechanism for component-coded digital high-definition television signals using MPEG-2 video coding including all service elements for contribution and primary distribution	

J.187 (2002) Corrigendum 1	 	04-2003		
J.188	 	07-2002	A framework for an efficient parallel video transmission system including codecs with functions of failure detection and picture quality evaluation	
J.189	 	07-2002	Seamless splicing for MPEG-2 bit streams	
J.189 (2002) Corrigendum 1	 	04-2003		

J.190-J.199: Cable modems

J.190	 	07-2002	Architecture of MediaHomeNet that supports cable-based services	
J.191	 	03-2004	IP feature package to enhance cable modems	Pre-published.
J.192	 	03-2004	A residential gateway to support the delivery of cable data services	Pre-published.









J.200-J.209: Application for Interactive Digital Television

J.200	 	03-2001	Worldwide common core – Application environment for digital interactive television services	
J.202	 	05-2003	Harmonization of procedural content formats for interactive TV applications	


















J.280-J.289: Digital transmission of television signals


J.280	 	03-2004	Digital Program Insertion: Splicing application programming interface	Pre-published.
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J-Series: Supplements to the Series J Recommendations

J.Sup1	 	11-1998	Example of linking options between annexes of ITU-T Recommendation J.112 and annexes of ITU-T Recommendation J.83	
J.Sup2	 	11-1998	Guidelines for the implementation of annex A of Recommendation J.112, "Transmission systems for interactive cable television services" – Example of digital video broadcasting (DVB) interaction channel for cable television distribution	
J.Sup3	 	11-1998	Guidelines for the implementation of Recommendation J.111 "Network independent protocols" – Example of digital video broadcasting (DVB) systems for interactive services	
J.Sup5	 	09-1999	Guidelines on the use of some ITU-T Recommendations in the J series	

Series K: Protection against interference

K.1			11-1988	Connection to earth of an audio-frequency telephone line in cable <i>Deleted after its content became technically out of date</i>	Withdrawn.
K.2			11-1988	Protection of repeater power-feeding systems against interference from neighbouring electricity lines <i>Deleted after its content became technically out of date</i>	Withdrawn.
K.3			11-1988	Interference caused by audio-frequency signals injected into a power distribution network <i>Deleted after its content became technically out of date</i>	Withdrawn.
K.4			11-1988	Disturbance to signalling <i>Deleted after its content became technically out of date</i>	Withdrawn.
K.5			11-1988	Joint use of poles for electricity distribution and for telecommunications	
K.6			11-1988	Precautions at crossings	
K.7			11-1988	Protection against acoustic shock	
K.8			11-1988	Separation in the soil between telecommunication cables and earthing system of power facilities	
K.9			11-1988	Protection of telecommunication staff and plant against a large earth potential due to a neighbouring electric traction line	
K.10			10-1996	Low frequency interference due to unbalance about earth of telecommunication equipment	
K.11			10-1993	Principles of protection against overvoltages and overcurrents	
K.12			02-2000	Characteristics of gas discharge tubes for the protection of telecommunications installations	
K.13			11-1988	Induced voltages in cables with plastic-insulated conductors	
K.14			11-1988	Provision of a metallic screen in plastic-sheathed cables	
K.16			11-1988	Simplified calculation method for estimating the effect of magnetic induction from power lines on remote-fed repeaters in coaxial pair telecommunication systems <i>Rec. K.16 was withdrawn because it deals only with calculation methods contained in the "Directives - Volume II: Calculating induced voltages and currents in practical cases" without giving any limit</i>	Withdrawn.
K.18			11-1988	Calculation of voltage induced into telecommunication lines from radio station broadcasts and methods of reducing interference	
K.19			11-1988	Joint use of trenches and tunnels for telecommunication and power cables	
K.20			07-2003	Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents	
K.20 (2003) Erratum 1			01-2004	Correction to table 7/K.20	
K.21			07-2003	Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents	
K.21 (2003) Erratum 1			01-2004	Correction to table 7/K.21	
K.23			11-1988	Types of induced noise and description of noise voltage parameters for ISDN basic user networks	
K.24			11-1988	Method for measuring radio-frequency induced noise on telecommunications pairs	
K.25			02-2000	Protection of optical fibre cables	
K.26			11-1988	Protection of telecommunication lines against harmful effects from electric power and electrified railway lines	
K.27			05-1996	Bonding configurations and earthing inside a telecommunication building	
K.28			03-1993	Characteristics of semi-conductor arrester assemblies for the protection of telecommunications installations	
K.29			01-1992	Coordinated protection schemes for telecommunication cables below ground	
K.30			03-1993	Positive temperature coefficient (PTC) thermistors	

K.31	 	03-1993	Bonding configurations and earthing of telecommunication installations inside a subscriber's building	
K.32		05-1995	Immunity requirements and test methods for electrostatic discharge to telecommunication equipment – Generic EMC Recommendation <i>The content of this Recommendation has been superseded by ITU-T K.43 (1998) and K.48 (2000)</i>	Withdrawn.
K.33	 	10-1996	Limits for people safety related to coupling into telecommunications system from a.c. electric power and a.c. electrified railway installations in fault conditions	
K.34	 	07-2003	Classification of electromagnetic environmental conditions for telecommunication equipment – Basic EMC Recommendation	
K.35	 	05-1996	Bonding configurations and earthing at remote electronic sites	
K.36	 	05-1996	Selection of protective devices	
K.37	 	02-1999	Low and high frequency EMC mitigation techniques for telecommunication installations and systems – Basic EMC Recommendation	
K.38	 	10-1996	Radiated emission test procedure for physically large systems	
K.39	 	10-1996	Risk assessment of damages to telecommunication sites due to lightning discharges	
K.40	 	10-1996	Protection against LEMP in telecommunications centres	
K.42	 	05-1998	Preparation of emission and immunity requirements for telecommunication equipment – General principles	
K.43	 	07-2003	Immunity requirements for telecommunication equipment	
K.44	 	07-2003	Resistibility tests for telecommunication equipment exposed to overvoltages and overcurrents – Basic Recommendation	
K.45	 	07-2003	Resistibility of telecommunication equipment installed in the access and trunk networks to overvoltages and overcurrents	
K.46	 	07-2003	Protection of telecommunication lines using metallic symmetric conductors against lightning-induced surges	
K.47	 	12-2000	Protection of telecommunication lines using metallic conductors against direct lightning discharges	
K.48	 	07-2003	EMC requirements for each telecommunication equipment – Product family Recommendation	
K.49	 	02-2000	Test condition and performance criteria for voice terminal subject to disturbance from digital mobile phone	
K.50	 	02-2000	Safe limits of operating voltages and currents for telecommunication systems powered over the network	
K.51	 	02-2000	Safety criteria for telecommunication equipment	
K.52	 	02-2000	Guidance on complying with limits for human exposure to electromagnetic fields	
K.53	 	02-2000	Values of induced voltages on telecommunication installations to establish telecom and a.c. power and railway operators responsibilities	
K.54	 	10-2000	Conducted immunity test method and level at fundamental power frequencies	
K.54 (2000) Erratum 1		08-2002	<i>Applies to Spanish version only</i>	
K.55	 	08-2002	Overvoltage and overcurrent requirements for insulation displacement connectors (IDC) terminations	
K.56	 	07-2003	Protection of radio base stations against lightning discharges	
K.57	 	09-2003	Protection measures for radio base stations sited on power line towers	
K.58	 	07-2003	EMC, resistibility and safety requirements and procedures for co-located telecommunication installations	
K.59	 	07-2003	EMC, resistibility and safety requirements and procedures for connection to unbundled cables	
K.60	 	07-2003	Emission limits and test methods for telecommunication networks	
K.61	 	09-2003	Guidance to measurement and numerical prediction of electromagnetic fields for compliance with human exposure limits for telecommunication installations	

K.62		02-2004	System level radiated emissions compliance using mathematical modelling	
K.63		02-2004	Maintaining the suitability of production telecommunications equipment to its intended electromagnetic environment	Pre-published. Available only in PDF.
K.64		02-2004	Safe working practices for outside equipment installed in particular environments	




































Series L: Construction, installation and protection of cables and other elements of outside plant

L.1	 	11-1988	Construction, installation and protection of telecommunication cables in public networks
L.2	 	11-1988	Impregnation of wooden poles
L.3	 	11-1988	Armouring of cables
L.4	 	11-1988	Aluminium cable sheaths
L.5	 	11-1988	Cable sheaths made of metals other than lead or aluminium
L.6	 	11-1988	Methods of keeping cables under gas pressure <i>The electronic copy of this Recommendation is freely available on ITU website</i>
L.7	 	11-1988	Application of joint cathodic protection
L.8	 	11-1988	Corrosion caused by alternating current
L.9	 	11-1988	Methods of terminating metallic cable conductors
L.10	 	12-2002	Optical fibre cables for duct and tunnel application
L.11	 	11-1988	Joint use of tunnels by pipelines and telecommunication cables, and the standardization of underground duct plans
L.12	 	05-2000	Optical fibre joints
L.13	 	04-2003	Performance requirements for passive optical nodes: Sealed closures for outdoor environments
L.14	 	07-1992	Measurement method to determine the tensile performance of optical fibre cables under load
L.15	 	03-1993	Optical local distribution networks – Factors to be considered for their construction
L.16	 	03-1993	Conductive plastic material (CPM) as protective covering for metal cable sheaths
L.17	 	06-1995	Implementation of connecting customers into the public switched telephone network (PSTN) via optical fibres
L.17 Appendix I	 	02-1997	Examples of possible applications
L.18	 	10-1996	Sheath closures for terrestrial copper telecommunication cables
L.19	 	11-2003	Multi-pair copper network cable supporting shared multiple services such as POTS, ISDN and xDSL
L.20	 	10-1996	Creation of a fire security code for telecommunication facilities
L.21	 	10-1996	Fire detection and alarm systems, detector and sounder devices
L.22	 	10-1996	Fire protection
L.23	 	10-1996	Fire extinction – Classification and location of fire extinguishing installations and equipment on premises
L.24	 	10-1996	Classification of outside plant waste
L.25	 	10-1996	Optical fibre cable network maintenance
L.26	 	12-2002	Optical fibre cables for aerial application
L.27	 	10-1996	Method for estimating the concentration of hydrogen in optical fibre cables
L.28	 	10-2002	External additional protection for maritized terrestrial cables
L.29	 	01-2002	As-laid report and maintenance/repair log for maritized terrestrial cable installation
L.30	 	10-1996	Markers on maritized terrestrial cables
L.31	 	10-1996	Optical fibre attenuators
L.32	 	10-1998	Protection devices for through-cable penetrations of fire-sector partitions
L.33	 	10-1998	Periodic control of fire extinction devices in telecommunication buildings
L.34	 	10-1998	Installation of Optical Fibre Ground Wire (OPGW) cable
L.35		10-1998	Installation of optical fibre cables in the access network



































L.36	 	10-1998	Single mode fibre optic connectors	
L.37	 	10-1998	Fibre optic (non-wavelength selective) branching devices	
L.38	 	09-1999	Use of trenchless techniques for the construction of underground infrastructures for telecommunication cable installation	
L.39	 	05-2000	Investigation of the soil before using trenchless techniques	
L.40	 	10-2000	Optical fibre outside plant maintenance support, monitoring and testing system	
L.41	 	05-2000	Maintenance wavelength on fibres carrying signals	
L.42	 	05-2003	Extending optical fibre solutions into the access network	
L.43	 	12-2002	Optical fibre cables for buried application	
L.44	 	10-2000	Electric power supply for equipment installed as outside plant	
L.45	 	10-2000	Minimizing the effect on the environment from the outside plant in telecommunication networks	
L.46	 	10-2000	Protection of telecommunication cables and plant from biological attack	
L.47	 	10-2000	Access facilities using hybrid fibre/copper networks	
L.48	 	03-2003	Mini-trench installation technique	
L.49	 	03-2003	Micro-trench installation technique	
L.50	 	11-2003	Requirements for passive optical nodes: Optical distribution frames in central office environments	
L.51	 	04-2003	Passive node elements for fibre optic networks – General principles and definitions for characterization and performance evaluation	
L.52	 	05-2003	Deployment of Passive Optical Network (PON)	
L.53	 	05-2003	Optical fibre maintenance criteria for access networks	
L.54	 	02-2004	Splice closure for maritized terrestrial cables (MTC)	
L.55	 	11-2003	Digital database for marine cables and pipelines	
L.56	 	05-2003	Installation of optical fibre cables along railways	
L.57	 	05-2003	Air-assisted installation of optical fibre cables	
L.58	 	03-2004	Optical fibre cables: Special needs for access network	Pre-published.











Series M: TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits

M.10-M.299: Introduction and general principles of maintenance and maintenance organization
















M.10	 	10-1992	Scope and application of Recommendations for maintenance of telecommunication networks and services
M.15	 	11-1988	Maintenance considerations for new systems
M.20	 	10-1992	Maintenance philosophy for telecommunication networks
M.21	 	10-1992	Maintenance philosophy for telecommunication services
M.32	 	11-1988	Principles for using alarm information for maintenance of international transmission systems and equipment
M.34	 	11-1988	Performance monitoring on international transmission systems and equipment
M.35	 	11-1988	Principles concerning line-up and maintenance limits
M.50		11-1988	Use of telecommunication terms for maintenance
M.60	 	03-1993	Maintenance terminology and definitions
M.70	 	11-1988	Guiding principles on the general maintenance organization for telephone-type international circuits
M.75	 	10-1992	Technical service
M.80	 	11-1988	Control stations
M.85	 	10-1992	Fault report points
M.90	 	11-1988	Sub-control stations
M.100	 	11-1988	Service circuits
M.110	 	11-1988	Circuit testing
M.120	 	11-1988	Access points for maintenance
M.125	 	11-1988	Digital loopback mechanisms
M.160	 	11-1988	Stability of transmission









M.300-M.559: International transmission systems

M.320	 	11-1988	Numbering of the channels in a group
M.330	 	11-1988	Numbering of groups within a supergroup
M.340	 	11-1988	Numbering of supergroups within a mastergroup
M.350	 	11-1988	Numbering of mastergroups within a supermastergroup
M.380	 	11-1988	Numbering in coaxial systems
M.390	 	11-1988	Numbering in systems on symmetric pair cable
M.400	 	11-1988	Numbering in radio-relay links or open-wire line systems
M.410	 	11-1988	Numbering of digital blocks in transmission systems
M.450	 	11-1988	Bringing a new international transmission system into service
M.460	 	11-1988	Bringing international group, supergroup, etc., links into service
M.470	 	11-1988	Setting up and lining up analogue channels for international telecommunication services
M.475	 	11-1988	Setting up and lining up mixed analogue/digital channels for international telecommunication services
M.495	 	11-1988	Transmission restoration and transmission route diversity: Terminology and general principles
M.496	 	11-1988	Functional organization for automatic transmission restoration
M.500	 	11-1988	Routine maintenance measurements to be made on regulated line sections
M.510	 	11-1988	Readjustment to the nominal value of a regulated line section (on a symmetric pair line, a coaxial line or a radio-relay link)
M.520	 	11-1988	Routine maintenance on international group, supergroup, etc., links





M.525	 	11-1988	Automatic maintenance procedures for international group, supergroup, etc., links
M.530	 	11-1988	Readjustment to the nominal value of an international group, supergroup, etc., link
M.535	 	11-1988	Special maintenance procedures for multiple destination, unidirectional (MU) group and supergroup links
M.540	 	11-1988	Routine maintenance of carrier and pilot generating equipment
M.556	 	11-1988	Setting up and initial testing of digital channels on an international digital path or block

M.560-M.759: International telephone circuits













M.560	 	11-1988	International telephone circuits – Principles, definitions and relative transmission levels
M.562	 	11-1988	Types of circuit and circuit section
M.565	 	11-1988	Access points for international telephone circuits
M.570	 	11-1988	Constitution of the circuit; preliminary exchange of information
M.580	 	11-1988	Setting up and lining up an international circuit for public telephony
M.585	 	11-1988	Bringing an international digital circuit into service
M.590	 	11-1988	Setting up and lining up a circuit fitted with a compandor
M.600	 	11-1988	Organization of routine maintenance measurements on circuits
M.605	 	11-1988	Routine maintenance schedule for international public telephony circuits
M.610	 	11-1988	Periodicity of maintenance measurements on circuits
M.620	 	11-1988	Methods for carrying out routine measurements on circuits
M.630	 	11-1988	Maintenance of circuits using control chart methods
M.650	 	11-1988	Routine line measurements to be made on the line repeaters of audio-frequency sections or circuits
M.660	 	11-1988	Periodical in-station tests of echo suppressors complying with Recommendations G.161 and G.164
M.665	 	11-1988	Testing of echo cancellers
M.670	 	11-1988	Maintenance of a circuit fitted with a compandor
M.675	 	11-1988	Lining up and maintaining international demand assignment circuits (SPADE)
M.710	 	11-1988	General maintenance organization for the international automatic and semi-automatic telephone service
M.715	 	11-1988	Fault report point (circuit)
M.716	 	11-1988	Fault report point (network)
M.717	 	11-1988	Testing point (transmission)
M.718	 	11-1988	Testing point (line signalling)
M.719	 	11-1988	Testing point (switching and interregister signalling)
M.720	 	11-1988	Network analysis point
M.721	 	11-1988	System availability information point
M.722	 	11-1980	Network management point
M.723		11-1988	Circuit control station
M.724		11-1988	Circuit sub-control station
M.725		11-1988	Restoration control point
M.726		11-1988	Maintenance organization for the wholly digital international automatic and semi-automatic telephone service
M.729		11-1988	Organization of the maintenance of international public switched telephone circuits used for data transmission <i>This Recommendation is also included but not published in V series under alias number V.51</i>
M.730		11-1988	Maintenance methods

M.731	 	11-1988	Subjective testing
M.732	 	11-1988	Signalling and switching routine maintenance tests and measurements
M.733	 	11-1988	Transmission routine maintenance measurements on automatic and semi-automatic telephone circuits
M.734	 	11-1988	Exchange of information on incoming test facilities at international switching centres





M.760-M.799: Common channel signalling systems

M.760	 	11-1988	Transfer link for common channel Signalling System No. 6
M.762	 	11-1988	Maintenance of common channel Signalling System No. 6





























M.800-M.899: International telegraph systems and phototelegraph transmission

M.800	 	11-1988	Use of circuits for voice-frequency telegraphy
M.810	 	11-1988	Setting up and lining up an international voice-frequency telegraph link for public telegraph circuits (for 50, 100 and 200 baud modulation rates)
M.820	 	11-1988	Periodicity of routine tests on international voice-frequency telegraph links
M.830	 	11-1988	Routine measurements to be made on international voice-frequency telegraph links
M.850	 	11-1988	International time division multiplex (TDM) telegraph systems
M.880	 	11-1988	International phototelegraph transmission



M.900-M.999: International leased group and supergroup links









M.900	 	11-1988	Use of leased group and supergroup links for wide-spectrum signal transmission (data, facsimile, etc.)
M.910	 	11-1988	Setting up and lining up an international leased group link for wide-spectrum signal transmission

M.1000-M.1099: International leased circuits





M.1010	 	11-1988	Constitution and nomenclature of international leased circuits
M.1012	 	11-1988	Circuit control station for leased and special circuits
M.1013	 	11-1988	Sub-control station for leased and special circuits
M.1014	 	11-1988	Transmission maintenance point (international line) (TMP-IL)
M.1015	 	11-1988	Types of transmission on leased circuits
M.1016	 	11-1988	Assessment of the service availability performance of international leased circuits
M.1020	 	03-1993	Characteristics of special quality international leased circuits with special bandwidth conditioning
M.1025	 	03-1993	Characteristics of special quality international leased circuits with basic bandwidth conditioning
M.1030	 	11-1988	Characteristics of ordinary quality international leased circuits forming part of private switched telephone networks
M.1040	 	11-1988	Characteristics of ordinary quality international leased circuits
M.1045	 	05-1996	Preliminary exchange of information for the provision of international leased circuits and international data transmission systems
M.1050	 	06-1998	Lining up an international point-to-point leased circuit with analogue presentation to the user
M.1055	 	11-1988	Lining up an international multiterminal leased circuit
M.1060	 	11-1988	Maintenance of international leased circuits

M.1100-M.1199: Mobile telecommunication systems and services






















M.1130	 	10-1992	General definitions and general principles of operation/maintenance
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			procedures to be used in satellite mobile systems	
M.1140	 	10-1992	Maritime mobile telecommunication services via satellite <i>Replaces M.1100, M.1110, M.1120</i>	
M.1150	 	04-1997	Maintenance aspects of maritime/land mobile telecommunication store-and-forward services (packet mode) via satellite	
M.1160	 	04-1997	Maintenance aspects of aeronautical mobile telecommunication service via satellite	
M.1170	 	04-1997	Maintenance aspects of mobile digital telecommunication service via satellite	

























M.1200-M.1299: International public telephone network

M.1230	 	05-1996	Method to improve the management of operations and maintenance processes in the international telephone network	
M.1235	 	11-1988	Use of automatically generated test calls for assessment of network performance	





















M.1300-M.1399: International data transmission systems

M.1300	 	10-1997	Maintenance of international data transmission systems operating in the range 2.4 kbit/s to 140 Mbit/s	
M.1301	 	01-2001	General description and operational procedures for international SDH leased circuits	
M.1320	 	11-1988	Numbering of channels in data transmission systems	
M.1340	 	02-2000	Performance objectives, allocations and limits for international PDH leased circuits and supporting data transmission links and systems	
M.1340 (2000) Cor.1		08-2001		Available only in PDF.
M.1350	 	11-1988	Setting up, lining up and characteristics of international data transmission systems operating in the range 2.4 kbit/s to 14.4 kbit/s	
M.1355	 	11-1988	Maintenance of international data transmission systems operating in the range 2.4 to 14.4 kbit/s	
M.1370	 	06-1998	Bringing-into-service of international data transmission systems	
M.1375	 	06-1998	Maintenance of international data transmission systems	
M.1380	 	02-2000	Bringing-into-service of international leased circuits that are supported by international data transmission systems	
M.1385	 	02-2000	Maintenance of international leased circuits that are supported by international data transmission systems	































M.1400-M.1999: Designations and information exchange









M.1400	 	01-2004	Designations for interconnections among operators' networks	
M.1401	 	03-2004	Formalization of interconnection designations among operators' networks	Pre-published.
M.1510	 	10-1992	Exchange of contact point information for the maintenance of international services and the international network	
M.1520	 	10-1992	Standardized information exchange between Administrations	
M.1530	 	03-1999	Network maintenance information	
M.1532	 	02-2000	Network maintenance service performance agreement (MSPA)	
M.1535	 	05-1996	Principles for maintenance information to be exchanged at customer contact point (MICC)	
M.1537	 	10-1997	Definition of maintenance information to be exchanged at customer contact point (MICC)	
M.1539	 	03-1999	Management of the grade of network maintenance services at the Maintenance Service Customer Contact Point (MSCC)	
M.1540	 	10-1994	Exchange of information for planned outages of transmission systems	
M.1550	 	10-1992	Escalation procedure	
M.1560	 	10-1992	Escalation procedure for international leased circuits	



M.2000-M.2999: International transport network

M.2100	 	04-2003	Performance limits for bringing-into-service and maintenance of international multi-operator PDH paths and connections	
M.2101	 	06-2003	Performance limits for bringing-into-service and maintenance of international multi-operator SDH paths and multiplex sections	
M.2102	 	02-2000	Maintenance thresholds and procedures for recovery mechanisms (protection and restoration) of international SDH VC trails (paths) and multiplex sections	
M.2110	 	07-2002	Bringing into service international multi-operator paths, sections and transmission systems	
M.2120	 	07-2002	International multi-operator paths, sections and transmission systems fault detection and localization procedures	
M.2130	 	02-2000	Operational procedures for the maintenance of the transport network	
M.2140	 	02-2000	Transport network event correlation	
M.2201	 	03-2001	Performance objectives, allocations and limits for bringing-into-service and maintenance of international ATM virtual path and virtual channel connections	
M.2301	 	07-2002	Performance objectives and procedures for provisioning and maintenance of IP-based networks	
M.2401	 	12-2003	Error performance limits and procedures for bringing-into-service and maintenance of multi-operator international paths and sections within an optical transport network	



























M.3000-M.3599: Telecommunications management network

M.3000	 	02-2000	Overview of TMN Recommendations	
M.3010	 	02-2000	Principles for a telecommunications management network	
M.3010 (2000) Amendment 1	 	12-2003	TMN conformance and TMN compliance	
M.3013	 	02-2000	Considerations for a telecommunications management network	
M.3016	 	06-1998	TMN Security Overview	
M.3017	 	06-2003	Framework for the integrated management of hybrid circuit/packet networks	
M.3020	 	02-2000	TMN Interface Specification Methodology	
M.3030	 	08-2002	Telecommunications Markup Language (tML) framework	
M.3100	 	07-1995	Generic network information model	
M.3100 (1995) Corrigendum 1	 	06-1998		
M.3100 (1995) Amendment 1	 	03-1999		
M.3100 (1995) Amendment 2	 	02-2000		
M.3100 (1995) Corrigendum 2	 	01-2001		
M.3100 (1995) Amendment 3	 	01-2001	Definition of the management interface for a generic alarm reporting control (ARC) feature	
M.3100 (1995) Corrigendum 3	 	08-2001		









M.3100 (1995) Amendment 4	 	08-2001	Definition of the management interface for a bridge-and-roll cross-connect feature	
M.3100 (1995) Amendment 5	 	08-2001	Enhanced cross-connect model	
M.3100 (1995) Amendment 6	 	03-2003		
M.3100 (1995) Amendment 7	 	12-2003		
M.3101	 	07-1995	Managed object conformance statements for the generic network information model	
<i>M.3108 TMN management services for dedicated and reconfigurable circuits network</i>				
M.3108.1	 	03-1999	Information model for management of leased circuit and reconfigurable services	
M.3108.1 (1999) Corrigendum 1	 	01-2001		
M.3108.2	 	02-2000	Information model for connection management of preprovisioned service link connections to form a reconfigurable leased service	
M.3108.3	 	01-2001	Information model for management of virtual private network service	
M.3120	  	10-2001	CORBA generic network and network element level information model	
M.3120 (2001) Amendment 1	 	05-2002	Protection switching	
M.3120 (2001) Amendment 2	 	03-2003		
M.3180	 	10-1992	Catalogue of TMN management information	
M.3200	 	04-1997	TMN management services and telecommunications managed areas: overview	
M.3207.1	 	05-1996	TMN management service: Maintenance aspects of B-ISDN management	
<i>M.3208 TMN management services for dedicated and reconfigurable circuits network</i>				
M.3208.1	 	10-1997	Leased circuit services	
M.3208.1 (1997) Corrigendum 1	 	02-2000		
M.3208.2	 	03-1999	Connection management of pre-provisioned service link connections to form a leased circuit service	
M.3208.2 (1999) Corrigendum 1	 	01-2001		
M.3208.3	 	02-2000	Virtual private network service	
M.3210.1	 	01-2001	TMN management services for IMT-2000 security management	
M.3211.1	 	05-1996	TMN management service: Fault and performance management of the ISDN access	
M.3300	 	06-1998	TMN F interface requirements	
M.3320	 	04-1997	Management requirements framework for the TMN X-Interface	
M.3341	 	12-2003	Requirements for QoS/SLA management over the TMN X-interface for IP-based services	Pre-published.

M.3400	 	02-2000	TMN management functions
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M.3600-M.3999: Integrated services digital networks





























M.3600	 	10-1992	Principles for the management of ISDNs
M.3602	 	10-1992	Application of maintenance principles to ISDN subscriber installations
M.3603	 	10-1992	Application of maintenance principles to ISDN basic rate access
M.3604	 	10-1992	Application of maintenance principles to ISDN primary rate access
M.3605	 	10-1992	Application of maintenance principles to static multiplexed ISDN basic rate access
M.3610	 	05-1996	Principles for applying the TMN concept to the management of B-ISDN
M.3611	 	04-1997	Test management of the B-ISDN ATM layer using the TMN
M.3620	 	10-1992	Principles for the use of ISDN test calls, systems and responders
M.3621	 	07-1995	Integrated management of the ISDN customer access
M.3640	 	10-1992	Management of the D-channel – Data link layer and network layer
M.3641	 	10-1994	Management information model for the management of the data link and network layer of the ISDN D-channel
M.3650	 	04-1997	Network performance measurements of ISDN calls
M.3660	 	10-1992	ISDN interface management services

M.4000-M.4999: Common channel signalling systems























M.4010	 	10-1992	Inter-Administration agreements on common channel Signalling System No. 6
M.4030	 	10-1992	Transmission characteristics for setting up and lining up a transfer link for common channel Signalling System N° 6 (analogue version)
M.4100	 	05-1996	Maintenance of common channel Signalling System No. 7
M.4110	 	05-1996	Inter-Administration agreements on common channel Signalling System No. 7

Series N: Maintenance: international sound programme and television transmission circuits

N.1-N.49: International sound-programme transmission

N.1	 	03-1993	Definitions for application to international sound-programme and television-sound transmission	
N.2	 	11-1988	Different types of sound-programme circuit	
N.3	 	11-1988	Control circuits	
N.4	 	11-1988	Definition and duration of the line-up period and the preparatory period	
N.5	 	11-1988	Sound-programme control, sub-control and send reference stations	
N.10	 	03-1993	Limits for the lining-up of international sound-programme links and connections	
N.11	 	11-1988	Essential transmission performance objectives for international sound-programme centres (ISPC)	
N.12	 	11-1988	Measurements to be made during the line-up period that precedes a sound-programme transmission	
N.13	 	11-1988	Measurements to be made by the broadcasting organizations during the preparatory period	
N.15	 	11-1988	Maximum permissible power during an international sound-programme transmission	
N.16	 	11-1988	Identification signal	
N.17	 	11-1988	Monitoring the transmission	
N.18	 	11-1988	Monitoring for charging purposes, releasing	
N.21	 	11-1988	Limits and procedures for the lining-up of a sound-programme circuit	
N.23	 	11-1988	Maintenance measurements to be made on international sound-programme circuits	

N.50-N.79: International television transmission









N.51	 	11-1988	Definitions for application to international television transmissions	
N.52	 	11-1988	Multiple destination television transmissions and coordination centres	
N.54	 	11-1988	Definition and duration of the line-up period and the preparatory period	
N.55	 	03-1993	Organization, responsibilities and functions of control and sub-control international television centres and control and sub-control stations for international television connections, links, circuits and circuit sections	
N.60	 	03-1993	Nominal amplitude of video signals at video interconnection points	
N.61	 	11-1988	Measurements to be made before the line-up period that precedes a television transmission	
N.62	 	03-1993	Tests to be made during the line-up period that precedes a television transmission	
N.63	 	11-1988	Test signals to be used by the broadcasting organizations during the preparatory period	
N.64	 	11-1988	Quality and impairment assessment	
N.67	 	03-1993	Monitoring television transmissions – Use of the field blanking interval	
N.73	 	11-1988	Maintenance of permanent international television circuits, links and connections	

N.80-N.99: International videoconference transmission

N.86		03-1993	Line-up and service commissioning of international videoconference systems operating at transmission bit rates of 1544 and 2048 kbit/s <i>Deleted because no system or equipment have implemented it during the last two study periods</i>	Withdrawn.
N.90		03-1993	Maintenance of international videoconference systems operating at transmission bit rates of 1544 and 2048 kbit/s <i>Deleted because no system or equipment have implemented it during</i>	Withdrawn.

Series O: Specifications of measuring equipment







O.1-O.9: General

O.1	 	02-2000	Scope and application of measurement equipment specifications covered in the O-series Recommendations	
O.3	 	10-1992	Climatic conditions and relevant tests for measuring equipment	
O.6	 	11-1988	1020 Hz reference test frequency	
O.9	 	03-1999	Measuring arrangements to assess the degree of unbalance about earth	

























O.10-O.19: Maintenance access

O.11	 	10-1992	Maintenance access lines	
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O.20-O.39: Automatic and semi-automatic measuring systems

O.22	 	10-1992	CCITT automatic transmission measuring and signalling testing equipment ATME No. 2	
O.25		11-1988	<i>Semiautomatic in-circuit echo suppressor testing system (ESTS) Deleted after its content became technically out of date</i>	Withdrawn.
O.27	 	11-1988	In-station echo canceller test equipment	
O.31		11-1988	<i>Automatic measuring equipment for sound-programme circuits Deleted after its content became technically out of date</i>	Withdrawn.
O.32		11-1988	<i>Automatic measuring equipment for stereophonic pairs of sound-programme circuits Deleted after its content became technically out of date</i>	Withdrawn.
O.33	 	07-1995	Automatic equipment for rapidly measuring stereophonic pairs and monophonic sound-programme circuits, links and connections	



O.40-O.129: Equipment for the measurement of analogue parameters

O.41	 	10-1994	Psophometer for use on telephone-type circuits <i>This Recommendation is also included but not published in P series under alias number P.53</i>	
O.42	 	11-1988	Equipment to measure non-linear distortion using the 4-tone intermodulation method	
O.61	 	11-1988	Simple equipment to measure interruptions on telephone-type circuits	
O.62	 	11-1988	Sophisticated equipment to measure interruptions on telephone-type circuits	
O.71	 	11-1988	Impulsive noise measuring equipment for telephone-type circuits <i>This Recommendation is also included but not published in V series under alias number V.55</i>	
O.81	 	11-1988	Group-delay measuring equipment for telephone-type circuits	
O.81 Appendix I	 	06-1998	A measuring signal (multitone test signal) for fast measurement of amplitude and phase for telephone type circuits <i>Covering note, May 2000: Erratum Formerly published as Supplement 3.7 in the Blue Book (1988), Fascicle IV.4, and then renumbered on 26 June 1998 as Appendix I to ITU-T O.81 without further modification.</i>	
O.81 Appendix I Erratum1	 	06-2000		
O.82	 	11-1988	Group-delay measuring equipment for the range 5 to 600 kHz	
O.91	 	11-1988	Phase jitter measuring equipment for telephone-type circuits	
O.95	 	11-1988	Phase and amplitude hit counters for telephone-type circuits	
O.111	 	11-1988	Frequency shift measuring equipment for use on carrier channels	

O.130-O.199: Equipment for the measurement of digital and analogue/digital parameters









O.131	 	11-1988	Quantizing distortion measuring equipment using a pseudo-random noise test signal	
O.132	 	11-1988	Quantizing distortion measuring equipment using a sinusoidal test signal	
O.133	 	03-1993	Equipment for measuring the performance of PCM encoders and decoders	
O.150	 	05-1996	General requirements for instrumentation for performance measurements on digital transmission equipment	
O.150 (1996) Corrigendum 1	 	05-2002		
O.151	 	10-1992	Error performance measuring equipment operating at the primary rate and above	
O.151 (1992) Corrigendum 1	 	05-2002		
O.152	 	10-1992	Error performance measuring equipment for bit rates of 64 kbit/s and N x 64 kbit/s	
O.153	 	10-1992	Basic parameters for the measurement of error performance at bit rates below the primary rate	
O.161	 	11-1988	In-service code violation monitors for digital systems	
O.162	 	10-1992	Equipment to perform in-service monitoring on 2048, 8448, 34 368 and 139 264 kbit/s signals	
O.163	 	11-1988	Equipment to perform in-service monitoring on 1544 kbit/s signals	
O.171	 	04-1997	Timing jitter and wander measuring equipment for digital systems which are based on the plesiochronous digital hierarchy (PDH)	
O.172	 	03-2001	Jitter and wander measuring equipment for digital systems which are based on the synchronous digital hierarchy (SDH)	
O.172 (2001) Amendment 1	 	03-2003		
O.173	 	03-2003	Jitter measuring equipment for digital systems which are based on the Optical Transport Network (ONT)	
O.181	 	05-2002	Equipment to assess error performance on STM-N interfaces	
O.191	 	02-2000	Equipment to measure the cell transfer performance of ATM connections	

O.200-O.209: Equipment for the measurement of optical channel parameters



O.201	 	07-2003	Q-factor test equipment to estimate the transmission performance of optical channels	
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Series P: Telephone transmission quality, telephone installations, local line networks



P.10-P.19: Vocabulary and effects of transmission parameters on customer opinion of transmission quality

P.10	 	12-1998	Vocabulary of terms on telephone transmission quality and telephone sets	
P.10 (1998) Amendment 1	 	11-2003	New Annex A – List of psychoacoustic parameters	
P.11	 	03-1993	Effect of transmission impairments	
P.16	 	11-1988	Subjective effects of direct crosstalk; thresholds of audibility and intelligibility	



























P.30-P.39: Subscribers' lines and sets

P.32	 	11-1988	Evaluation of the efficiency of telephone booths and acoustic hoods	
P.33		11-1988	Subscriber telephone sets containing either loudspeaking receivers or microphones associated with amplifiers <i>Deleted after the relevant information contained in this Recommendation was incorporated in new ITU-T P.340</i>	Withdrawn.



P.40-P.49: Transmission standards

P.48	 	11-1988	Specification for an intermediate reference system	
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P.50-P.59: Objective measuring apparatus





P.50	 	09-1999	Artificial voices <i>Covering note, May 2000: Erratum</i>	
P.50 Erratum 1	 	05-2000		
P.50 Appendix I	 	02-1998	Test signals <i>This Appendix includes an electronic attachment containing the speech database for telephony applications. Due to volume constraints, this database is only available on CD-ROM. The text of the appendix remains freely available on the ITU website for information purposes</i>	
P.51	 	08-1996	Artificial mouth	
P.52	 	03-1993	Volume meters	
O.41	 	10-1994	Psophometer for use on telephone-type circuits <i>This Recommendation is also included but not published in P series under alias number P.53</i>	
P.54	 	11-1988	Sound level meters (apparatus for the objective measurement of room noise)	
P.55	 	11-1988	Apparatus for the measurement of impulsive noise	
P.56	 	03-1993	Objective measurement of active speech level <i>Corresponding ANSI-C code is available in the SV56 module of the ITU-T G.191 Software Tools Library</i>	
P.57	 	07-2002	Artificial ears	
P.58	 	08-1996	Head and torso simulator for telephony	
P.58 Erratum 1	 	01-2003		
P.59	 	03-1993	Artificial conversational speech	

P.60-P.69: Objective electro-acoustical measurements

















P.61	 	11-1988	Methods for the calibration of condenser microphones	
P.62		03-1993	Measurements on subscribers' telephone equipment <i>P.62 is out of date and was deleted. The relevant text therein was transferred to ITU-T P.350</i>	Withdrawn.
P.63		11-1988	Methods for the evaluation of transmission quality on the basis of	Withdrawn.

objective measurements





As this Recommendation didn't contain technical description, but only references to other out of date Recommendations and Supplements, it became obsolete and was deleted

P.64	 	09-1999	Determination of sensitivity/frequency characteristics of local telephone systems <i>Covering note, May 2000: Erratum</i>	
P.64 Erratum 1	 	05-2000		
P.65		03-1993	Objective instrumentation for the determination of loudness ratings <i>P.65 is out of date and was deleted. The relevant text therein was transferred to ITU-T P.64</i>	Withdrawn.
P.66		03-1993	Methods for evaluating the transmission performance of digital telephone sets <i>Deleted after having been merged with P.31 into ITU-T P.310</i>	Withdrawn.





















P.70-P.79: Measurements related to speech loudness

P.75	 	11-1988	Standard conditioning method for handsets with carbon microphones	
P.76	 	11-1988	Determination of loudness ratings; fundamental principles	
P.78	 	02-1996	Subjective testing method for determination of loudness ratings in accordance with Recommendation P.76	
P.79	 	09-1999	Calculation of loudness ratings for telephone sets <i>Covering note, May 2000: Erratum Covering note, 24 October 2000: Corrigendum 1</i>	
P.79 Erratum 1	 	05-2000		
P.79 (1999) Corrigendum 1	 	10-2000	<i>Published as a covering note</i>	
P.79 (1999) Corrigendum 2	 	05-2001	<i>Published as a covering note</i>	
P.79 Annex G	 	11-2001	Wideband loudness rating algorithm	











P.80-P.89: Methods for objective and subjective assessment of quality

P.82	 	11-1988	Method for evaluation of service from the standpoint of speech transmission quality	
P.85	 	06-1994	A method for subjective performance assessment of the quality of speech voice output devices	

















P.300-P.399: Subscribers' lines and sets

P.300	 	11-2001	Transmission performance of group audio terminals (GATs)	
P.310	 	03-2003	Transmission characteristics for telephone band (300-3400 Hz) digital telephones	
P.311	 	02-1998	Transmission characteristics for wideband (150-7000 Hz) digital handset telephones	
P.313	 	09-1999	Transmission characteristics for cordless and mobile digital terminals	
P.330	 	03-2003	Speech processing devices for acoustic enhancement	
P.330 (2003) Amendment 1	 	09-2003		
P.340	 	05-2000	Transmission characteristics and speech quality parameters of hands-free terminals	
P.340 (2000) Corrigendum 1	 	03-2004		
P.341	 	02-1998	Transmission characteristics for wideband (150-7000 Hz) digital hands-free telephony terminals	
P.341 (1998)	 	09-1999		























Corrigendum 1

P.342	 	05-2000	Transmission characteristics for telephone band (300-3400 Hz) digital loudspeaking and hands-free telephony terminals
P.350	 	03-2001	Handset dimensions
P.360	 	12-1998	Efficiency of devices for preventing the occurrence of excessive acoustic pressure by telephone receivers <i>Former Rec. P.36, renumbered P.360</i>
P.370	 	08-1996	Coupling hearing aids to telephone sets <i>Former Rec. P.37, renumbered P.370</i>
P.380	 	11-2003	Electro-acoustic measurements on headsets



P.500-P.599: Objective measuring apparatus



P.501	 	05-2000	Test signals for use in telephony <i>This Recommendation includes an electronic attachment containing test signals for telephony applications.</i>
P.501 Erratum 1	 	09-2001	
P.502	 	05-2000	Objective test methods for speech communication systems using complex test signals
P.502 Erratum 1	 	07-2001	
P.561	 	07-2002	In-service non-intrusive measurement device – Voice service measurements
P.561 Appendix III	 	02-1998	Digital speech recordings <i>This Appendix includes one CD-ROM containing digital speech recordings for INMD devices testing.</i>
P.562	 	05-2000	Analysis and interpretation of INMD voice-service measurements
P.581	 	05-2000	Use of head and torso simulator (HATS) for hands-free terminal testing



P.800-P.899: Methods for objective and subjective assessment of quality

P.800	 	08-1996	Methods for subjective determination of transmission quality <i>Former Rec. P.80</i>	
P.800.1	 	03-2003	Mean Opinion Score (MOS) terminology	
P.810	 	02-1996	Modulated noise reference unit (MNRU) <i>Corresponding ANSI-C code is available in the MNRU module of the ITU-T G.191 Software Tools Library</i>	
P.830	 	02-1996	Subjective performance assessment of telephone-band and wideband digital codecs	
P.831	 	12-1998	Subjective performance evaluation of network echo cancellers	
P.832	 	05-2000	Subjective performance evaluation of hands-free terminals	
P.833	 	02-2001	Methodology for derivation of equipment impairment factors from subjective listening-only tests	
P.834	 	07-2002	Methodology for the derivation of equipment impairment factors from instrumental models	
P.835	 	11-2003	Subjective test methodology for evaluating speech communication systems that include noise suppression algorithm	
P.840	 	11-2003	Subjective listening test method for evaluating circuit multiplication equipment <i>Former ITU-T P.84</i>	
P.851	 	11-2003	Subjective quality evaluation of telephone services based on spoken dialogue systems	
P.861		02-1998	Objective quality measurement of telephone-band (300-3400 Hz) speech codecs <i>P.861 was recognized as having certain limitations in specific areas of application. It was replaced by P.862, which contains an improved objective speech quality assessment algorithm. P.861 included one</i>	Withdrawn.



diskette containing test vectors for implementation verification of the PSQM algorithm



P.862   02-2001 Perceptual evaluation of speech quality (PESQ): An objective method for end-to-end speech quality assessment of narrow-band telephone networks and speech codecs

P.862 (2001) Amendment 1   03-2003 Revised Annex A: Source code for the reference implementation and conformance tests



P.862.1   11-2003 Mapping function for transforming P.862 raw result scores to MOS-LQO



P.900-P.999: Audiovisual quality in multimedia services



P.910   09-1999 Subjective video quality assessment methods for multimedia applications

P.911   12-1998 Subjective audiovisual quality assessment methods for multimedia applications



P.911 (1998) Corrigendum 1   09-1999



P.920   05-2000 Interactive test methods for audiovisual communications



P.930   08-1996 Principles of a reference impairment system for video



P.931   12-1998 Multimedia communications delay, synchronization and frame rate measurement

P-Series: Supplements to the Series P Recommendations

P.sup10   11-1988 Considerations relating to transmission characteristics for analogue handset telephones





P.sup16   11-1988 Guidelines for placement of microphones and loudspeakers in telephone conference rooms and for group audio terminals (GATs)

P.sup20   03-1993 Examples of measurements of handset receive-frequency responses: dependence on earcap leakage losses

P.Sup23   02-1998
ITU-T coded-speech database
This Supplement includes 3 CD-ROMs containing the ITU-T coded speech database for 8 kbit/s codec tests. Due to the quantity of data, this publication is only available on CD-ROM. The text of the Supplement is freely available on ITU website for information purposes













Series Q: Switching and signalling

Q.1-Q.3: Signalling in the international manual service











Q.1	 	11-1988	Signal receivers for manual working	
Q.2	 	11-1988	Signal receivers for automatic and semi-automatic working, used for manual working	

Q.4-Q.59: International automatic and semi-automatic working





Q.4-Q.9: Basic Recommendations

Q.4	 	11-1988	Automatic switching functions for use in national networks	
Q.5	 	11-1988	Advantages of semi-automatic service in the international telephone service	
Q.6	 	11-1988	Advantages of international automatic working	
Q.7	 	11-1988	Signalling systems to be used for international automatic and semi-automatic telephone working	
Q.8	 	11-1988	Signalling systems to be used for international manual and automatic working on analogue leased circuits	
Q.9	 	11-1988	Vocabulary of switching and signalling terms	















Q.10-Q.11: Numbering plan and dialling procedures in the international service















Q.10		11-1988	Definitions relating to national and international numbering plans <i>Deleted Q.10 was an extract of ITU-T E.160. E.160 was later replaced by ITU-T E.164</i>	Withdrawn.
I.331	 	05-1997	The international public telecommunication numbering plan <i>This Recommendation is published under alias number E.164</i>	
E.164 Supplement 1	 	03-1998	Alternatives for carrier selection and network identification	
E.164 Supplement 2	 	11-1998	Number Portability	
E.164 Supplement 3	 	05-2002	Operational and administrative issues associated with national implementations of the ENUM functions	
E.164 Supplement 4	 	05-2003	Operational and administrative issues associated with the implementation of ENUM for non-geographic country codes	

Q.12-Q.19: Routing plan for international service



Q.12	 	11-1988	Overflow – alternative routing – rerouting – automatic repeat attempt	
Q.14	 	11-1988	Means to control the number of satellite links in an international telephone connection	
Q.15		11-1988	Nominal mean power during the busy hour <i>Deleted. Q.15 was an extract of ITU-T G.223. ITU-T G.223 remains valid</i>	Withdrawn.

Q.20-Q.34: General Recommendations relative to signalling and switching systems (national or international)







Q.20	 	11-1988	Comparative advantages of "in-band" and "out-band" systems	
Q.21	 	11-1988	Systems recommended for out-band signalling	
Q.22	 	11-1988	Frequencies to be used for in-band signalling	
Q.23	 	11-1988	Technical features of push-button telephone sets	
Q.24	 	11-1988	Multifrequency push-button signal reception	
Q.25	 	11-1988	Splitting arrangements and signal recognition times in "in-band" signalling systems	
Q.26	 	11-1988	Direct access to the international network from the national network	

Q.27	 	11-1988	Transmission of the answer signal	
Q.28	 	11-1988	Determination of the moment of the called subscriber's answer in the automatic service	
Q.29	 	11-1988	Causes of noise and ways of reducing noise in telephone exchanges	
Q.30	 	11-1988	Improving the reliability of contacts in speech circuits	
Q.31	 	11-1988	Noise in a national 4-wire automatic exchange	
Q.32	 	11-1988	Reduction of the risk of instability by switching means	
Q.33	 	11-1988	Protection against the effects of faulty transmission on groups of circuits	

Q.35-Q.39: Tones for use in national signalling systems

E.180/Q.35	 	03-1998	Technical characteristics of tones for the telephone service <i>This Recommendation is published with the double number E.180 and Q.35</i>	
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Q.40-Q.47: General characteristics for international telephone connections and circuits

Q.40		11-1988	The transmission plan <i>Deleted Q.40 was an extract of ITU-T G.101. ITU-T G.101 remains valid</i>	Withdrawn.
Q.41		11-1988	Mean one-way propagation time <i>Deleted Q.41 was an extract of ITU-T G.114. ITU-T G.114 remains valid</i>	Withdrawn.
Q.43		11-1988	Transmission losses, relative levels <i>Deleted Q.43 was an extract of ITU-T G.101. ITU-T G.101 remains valid</i>	Withdrawn.
Q.44	 	11-1988	Attenuation distortion	
Q.45	 	10-1984	Transmission characteristics of an analogue international exchange	
Q.45bis	 	11-1988	Transmission characteristics of an analogue international exchange	

Q.48-Q.49: Signalling for satellite systems



Q.48	 	11-1988	Demand assignment signalling systems	
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Q.50-Q.59: Signalling for circuit multiplication equipment









Q.50	 	07-2001	Signalling between Circuit Multiplication Equipment (CME) and International Switching Centres (ISC)	
Q.50.1	 	07-2001	Signalling between International Switching Centres (ISC) and Digital Circuit Multiplication Equipment (DCME) including the control of compression/decompression	
Q.50.2	 	12-2002	Signalling between International Switching Centres (ISC) and Digital Circuit Multiplication Equipment (DCME) including the control of compression/decompression over an IP network	
Q.52	 	03-2001	Signaling between international switching centers and stand-alone echo control devices	
Q.55	 	12-1999	Signalling between signal processing network equipments (SPNE) and international switching centres (ISC)	
Q.56	 	05-2001	Signalling between signal processing network equipment (SPNE) and international switching centres (ISC) over an IP network	

Q.60-Q.99: Functions and information flows for services in the ISDN



Q.60-Q.67: Methodology

Q.65	 	06-2000	The unified functional methodology for the characterization of services and network capabilities including alternative object oriented techniques	
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







Q.68-Q.79: Basic services

Q.68	 	03-1993	Overview of methodology for developing management services	
Q.71	 	03-1993	ISDN circuit mode switched bearer services	
Q.72	 	03-1993	Stage 2 description for packet mode services	
Q.76	 	02-1995	Service procedures for Universal Personal Telecommunication – Functional modelling and information flows	









Q.80-Q.99: Supplementary services

Q.80	 	11-1988	Introduction to stage 2 service descriptions for supplementary services	
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Q.81 Stage 2 description for number identification supplementary services

Q.81.1	 	11-1988	Direct dialling-in	
Q.81.2	 	02-1992	Multiple subscriber number <i>Published with ITU-T Q.81.8.</i>	
Q.81.3	 	09-1991	Calling line identification presentation (CLIP) and calling line identification restriction (CLIR) <i>Published with ITU-T Q.81.5.</i>	
Q.81.5	 	09-1991	Connected line identification, presentation and restriction (COLP) and (COLR) <i>Published with ITU-T Q.81.3.</i>	
Q.81.7	 	06-1997	Malicious call identification (MCID) <i>This subject was only recognised and is for further study</i>	
Q.81.8	 	02-1992	Sub-addressing (SUB) <i>Published with ITU-T Q.81.2.</i>	





Q.82 Stage 2 description for call offering supplementary services

Q.82.1		11-1988	Call transfer <i>Empty Recommendation. This service has only been identified and requires further study</i>	
Q.82.2	 	03-1993	call forwarding <i>Published with ITU-T Q.82.3.</i>	
Q.82.3	 	03-1993	Call deflection <i>Published with ITU-T Q.82.2.</i>	
Q.82.4	 	11-1988	Line hunting	
Q.82.7	 	07-1996	Explicit call transfer	





Q.83 Stage 2 description for call completion supplementary services





Q.83.1	 	09-1991	Call waiting (CW) <i>Published with ITU-T Q.83.4.</i>	
Q.83.2	 	02-1992	Call hold	
Q.83.3		11-1988	Completion of call to busy subscriber <i>Empty Recommendation. This service has only been identified and requires further study</i>	Available only in PDF.
Q.83.4		09-1991	Terminal portability <i>Published with ITU-T Q.83.1</i>	

Q.84 Stage 2 description for multiparty supplementary services









Q.84.1	 	03-1993	Conference calling (CONF)	
Q.84.2	 	10-1995	Three-party service	

Q.85 Stage 2 description for community of interest supplementary services



Q.85.1	 	02-1992	Closed user group <i>Published with ITU-T Q.85.3.</i>	
Q.85.3	 	02-1992	Multi-level precedence and preemption (MLPP) <i>Published with ITU-T Q.85.1.</i>	

Q.85.6	 	02-1995	Global Virtual Network Service (GVNS)
Q.85.6 Annex A	 	07-1996	Service procedures and information flows based on intelligent network CS-1 capabilities

Q.86 Stage 2 description for charging supplementary services





















Q.86.1		11-1988	Credit card call <i>Empty Recommendation. This service has only been identified and requires further study</i>
Q.86.2	 	10-1995	Advice of charge (AOC)
Q.86.3	 	03-1993	Reverse charging (REV)
Q.86.4	 	06-1997	International Freephone Service (IFS)
Q.86.7	 	10-1995	International Telecommunication Charge Card (ITCC)

Q.87 Stage 2 description for additional information transfer supplementary services









Q.87.1	 	03-1993	User-to-user signalling (UUS)
Q.87.2		11-1988	User signalling bearer services <i>Empty Recommendation. This service has only been identified and requires further study</i>

Q.100-Q.119: Clauses applicable to ITU-T standard systems







Q.100-Q.109: General clauses

Q.101	 	11-1988	Facilities provided in international semi-automatic working
Q.102	 	11-1988	Facilities provided in international automatic working
Q.103	 	11-1988	Numbering used
Q.104	 	11-1988	Language digit or discriminating digit
Q.105	 	11-1988	National (significant) number
Q.106	 	11-1988	The sending-finished signal
Q.107	 	11-1988	Standard sending sequence of forward address information
Q.107bis	 	03-1993	Analysis of forward address information for routing
Q.108	 	11-1988	One-way or both-way operation of international circuits
Q.109	 	11-1988	Transmission of the answer signal in international exchanges



Q.110-Q.114: Transmission clauses for signalling







Q.110	 	11-1988	General aspects of the utilization of standardized CCITT signalling systems on PCM links
Q.112	 	11-1988	Signal levels and signal receiver sensitivity
Q.113	 	11-1988	Connection of signal receivers in the circuit
Q.114	 	11-1988	Typical transmission requirements for signal senders and receivers

Q.115-Q.115: Logic and protocols for the control of signal processing network elements and functions











Q.115.0	 	12-2002	Protocols for the control of signal processing network elements and functions
Q.115.0 Erratum 1	 	09-2003	
Q.115.1	 	12-2002	Logic for the control of echo control devices and functions <i>Formerly Rec. Q.115</i>

Q.116-Q.119: Abnormal conditions

Q.116	 	11-1988	Indication given to the outgoing operator or calling subscriber in case of an abnormal condition
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Q.117	 	11-1988	Alarms for technical staff and arrangements in case of faults
Q.118	 	09-1997	Abnormal conditions – Special release arrangements
Q.118bis	 	11-1988	Indication of congestion conditions at transit exchanges

Q.120-Q.499: Specifications of Signalling Systems No. 4, 5, 6, R1 and R2











Q.120-Q.139	 	11-1988	Specifications of Signalling system No. 4
Q.140-Q.180	 	11-1988	Specifications of Signalling System No. 5
Q.251-Q.300	 	11-1988	Specifications of Signalling System No. 6
Q.310-Q.332	 	11-1988	Specifications of Signalling System R1
Q.400-Q.490	 	11-1988	Specifications of Signalling System R2

Q.500-Q.599: Digital exchanges









Q.500-Q.509: Introduction and field of application

Q.500	 	11-1988	Digital local, combined, transit and international exchanges – Introduction and field of application
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



Q.510-Q.539: Exchange interfaces, functions and connections

Q.511	 	11-1988	Exchange interfaces towards other exchanges
Q.512	 	02-1995	Digital exchange interfaces for subscriber access
Q.513	 	03-1993	Digital exchange interfaces for operations, administration and maintenance
Q.521	 	03-1993	Digital exchange functions
Q.522	 	11-1988	Digital exchange connections, signalling and ancillary functions

Q.540-Q.549: Design objectives and measurement















Q.541	 	03-1993	Digital exchange design objectives – General
Q.542	 	03-1993	Digital exchange design objectives – Operations and maintenance
Q.543	 	03-1993	Digital exchange performance design objectives
Q.544	 	11-1988	Digital exchange measurements



Q.550-Q.599: Transmission characteristics

Q.551	 	01-2002	Transmission characteristics of digital exchanges
Q.552	 	11-2001	Transmission characteristics at 2-wire analogue interfaces of digital exchanges
Q.553	 	11-2001	Transmission characteristics at 4-wire analogue interfaces of digital exchanges
Q.554	 	11-1996	Transmission characteristics at digital interfaces of digital exchanges











































































Q.600-Q.699: Interworking of Signalling Systems























Q.600-Q.609: General considerations

Q.601	 	03-1993	Interworking of signalling systems – General
Q.602	 	03-1993	Interworking of signalling systems – Introduction
Q.603	 	11-1988	Events
Q.604	 	03-1993	Interworking of signalling systems – Information analysis tables
Q.605	 	11-1988	Drawing conventions
Q.606	 	11-1988	Logic procedures
Q.607	 	11-1988	Interworking requirements for new signalling systems



Q.608   11-1988 Miscellaneous interworking aspects

Q.610-Q.697: Logic procedures







Q.611	 	11-1988	Logic procedures for incoming signalling system No. 4
Q.612	 	11-1988	Logic procedures for incoming signalling system No. 5
Q.613	 	11-1988	Logic procedures for incoming signalling system No. 6
Q.614	 	03-1993	Logic procedures for incoming Signalling System No. 7 (TUP)
Q.615	 	11-1988	Logic procedures for incoming signalling system R1
Q.616	 	11-1988	Logic procedures for incoming signalling system R2
Q.617	 	03-1993	Logic procedures for incoming signalling system No. 7 (ISUP)
Q.621	 	11-1988	Logic procedures for outgoing signalling system No. 4
Q.622	 	11-1988	Logic procedures for outgoing signalling system No. 5
Q.623	 	11-1988	Logic procedures for outgoing signalling system No. 6
Q.624	 	03-1993	Logic procedures for outgoing Signalling System No. 7 (TUP)
Q.625	 	11-1988	Logic procedures for outgoing signalling system R1
Q.626	 	11-1988	Logic procedures for outgoing signalling system R2
Q.627	 	03-1993	Logic procedures for outgoing Signalling System No. 7 (ISUP)
Q.634	 	11-1988	Logic procedures for interworking of signalling system No. 4 to R2
Q.642	 	11-1988	Logic procedures for interworking of signalling system No. 5 to No. 6
Q.643	 	11-1988	Logic procedures for interworking of signalling system No. 5 to No. 7 (TUP)
Q.644	 	11-1988	Logic procedures for interworking of signalling system No. 5 to R1
Q.645	 	11-1988	Logic procedures for interworking of signalling system No. 5 to R2
Q.646	 	03-1993	Logic procedures for interworking of Signalling System No. 5 to Signalling System No. 7 (ISUP)
Q.652	 	11-1988	Logic procedures for interworking of signalling system No. 6 to No. 5
Q.653	 	11-1988	Logic procedures for interworking of signalling system No. 6 to No. 7 (TUP)
Q.654	 	11-1988	Logic procedures for interworking of signalling system No. 6 to R1
Q.655	 	11-1988	Logic procedures for interworking of signalling system No. 6 to R2
Q.656	 	03-1993	Logic procedures for interworking of Signalling System No. 6 to Signalling System No. 7 (ISUP)
Q.662	 	11-1988	Logic procedures for interworking of signalling system No. 7 (TUP) to No. 5
Q.663	 	11-1988	Logic procedures for interworking of signalling system No. 7 (TUP) to No. 6
Q.664	 	11-1988	Logic procedures for interworking of signalling system No. 7 (TUP) to No. 7 (TUP)
Q.665	 	11-1988	Logic procedures for interworking of signalling system No. 7 (TUP) to R1
Q.666	 	11-1988	Logic procedures for interworking of signalling system No. 7 (TUP) to R2
Q.667	 	03-1993	Logic procedures for interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)
Q.671	 	11-1988	Logic procedures for interworking of signalling system R1 to No. 5
Q.672	 	11-1988	Logic procedures for interworking of signalling system R1 to No. 6
Q.673	 	11-1988	Logic procedures for interworking of signalling system R1 to No. 7 (TUP)
Q.674	 	11-1988	Logic procedures for interworking of signalling system R1 to R2
Q.675	 	03-1993	Logic procedures for interworking of Signalling System R1 to Signalling System No. 7 (ISUP)
Q.681	 	11-1988	Logic procedures for interworking of signalling system R2 to No. 4

Q.682	 	11-1988	Logic procedures for interworking of signalling system R2 to No. 5
Q.683	 	11-1988	Logic procedures for interworking of signalling system R2 to No. 6
Q.684	 	11-1988	Logic procedures for interworking of signalling system R2 to No. 7 (TUP)
Q.685	 	11-1988	Logic procedures for interworking of signalling system R2 to R1
Q.686	 	03-1993	Logic procedures for interworking of Signalling System R2 to Signalling System No. 7 (ISUP)
Q.690	 	03-1993	Logic procedures for interworking of Signalling System No. 7 (ISUP) to No. 5
Q.691	 	03-1993	Logic procedures for interworking of Signalling System No. 7 (ISUP) to No. 6
Q.692	 	03-1993	Logic procedures for interworking of Signalling System No. 7 (ISUP) to No. 7 (TUP)
Q.694	 	03-1993	Logic procedures for interworking of signalling system No. 7 (ISUP) to R1
Q.695	 	03-1993	Logic procedures for interworking of Signalling System No. 7 (ISUP) to R2
Q.696	 	06-1997	Interworking between the Signalling System No. 7 ISDN User Part (ISUP) and Signalling Systems No. 5, R2 and Signalling System No. 7 TUP

Q.698-Q.698: Interworking of Signalling Systems No. 7 and No. 6

Q.698	 	03-1993	Interworking of Signalling System No. 7 ISUP, TUP and Signalling System No. 6 using arrow diagrams
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Q.699-Q.699: Interworking between Digital Subscriber Signalling System No. 1 and Signalling System No. 7





















Q.699	 	09-1997	Interworking between ISDN access and non-ISDN access over ISDN User Part of Signalling System No. 7
Q.699 Addendum 1	 	12-1999	DSS1-SS7 interworking for call completion on no reply
Q.699.1	 	05-1998	Interworking between ISDN access and non-ISDN access over ISDN user part of signalling system No. 7: Support of VPN applications with PSS1 information flows

Q.700-Q.799: Specifications of Signalling System No. 7













Q.700-Q.700: General

Q.700	 	03-1993	Introduction to CCITT Signalling System No. 7
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








Q.701-Q.709: Message transfer part (MTP)

Q.701	 	03-1993	Functional description of the message transfer part (MTP) of Signalling System No. 7
Q.702	 	11-1988	Signalling data link
Q.703	 	07-1996	Signalling link
Q.704	 	07-1996	Signalling network functions and messages <i>Covering note, 17.09.99: Erratum (english only)</i>
Q.705	 	03-1993	Signalling network structure
Q.706	 	03-1993	Message transfer part signalling performance
Q.707	 	11-1988	Testing and maintenance
Q.708	 	03-1999	Assignment procedures for international signalling point codes
Q.709	 	03-1993	Hypothetical signalling reference connection
Q.710	 	11-1988	Simplified MTP version for small systems



Q.711-Q.719: Signalling connection control part (SCCP)

Q.711	 	03-2001	Functional description of the signalling connection control part
Q.712	 	07-1996	Definition and function of Signalling connection control part messages
Q.713	 	03-2001	Signalling connection control part formats and codes
Q.714	 	05-2001	Signalling connection control part procedures
Q.715	 	04-2002	Signalling connection control part user guide
Q.716	 	03-1993	Signalling System No. 7 – Signalling connection control part (SCCP) performance















Q.720-Q.729: Telephone user part (TUP)

Q.721	 	11-1988	Functional description of the Signalling System No. 7 Telephone User Part (TUP)
Q.722	 	11-1988	General function of telephone messages and signals
Q.723	 	11-1988	Telephone user part formats and codes <i>A Corrigendum was indicated in 03/1993.</i>
Q.723 (1988) Amendment 1	 	03-1993	
Q.724	 	11-1988	Telephone user part signalling procedures
Q.724 (1988) Amendment 1	 	03-1993	
Q.725	 	03-1993	Signalling performance in the telephone application







Q.730-Q.739: ISDN supplementary services

Q.730	 	12-1999	ISDN User Part supplementary services
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Q.731 Stage 3 description for number identification supplementary services using Signalling System No. 7





Q.731.1	 	07-1996	Direct-dialling-in (DDI)
Q.731.3	 	03-1993	Calling line identification presentation (CLIP)
Q.731.4	 	03-1993	Calling line identification restriction (CLIR)
Q.731.5	 	03-1993	Connected line identification presentation (COLP)
Q.731.6	 	03-1993	Connected line identification restriction (COLR)
Q.731.7	 	06-1997	Malicious call identification (MCID)
Q.731.8	 	02-1992	Sub-addressing (SUB) <i>Published with ITU-T Q.731.1.</i>

Q.732 Stage 3 description for call offering supplementary services using Signalling System No. 7





Q.732.2-5	 	12-1999	Call diversion services: - Call forwarding busy - Call forwarding no reply - Call forwarding unconditional - Call deflection <i>Call diversion Recommendation groups four services the stage 3 descriptions of which are similar: Q.732.2 – Call Forwarding Busy (CFB) Q.732.3 – Call Forwarding No Reply (CFNR) Q.732.4 – Call Forwarding Unconditional (CFU) Q.732.5 – Call Deflection (CD).</i>
Q.732.2-5 (1999) Amendment 1	 	07-2001	
Q.732.7	 	07-1996	Explicit call transfer

Q.733 Stage 3 description for call completion supplementary services using Signalling System No. 7







Q.733.1	 	02-1992	Call waiting (CW)
Q.733.2	 	03-1993	Call hold (HOLD) <i>Published with ITU-T Q.733.4.</i>
Q.733.3	 	06-1997	Completion of calls to busy subscriber (CCBS)
Q.733.3	 	07-2001	

(1997) Amendment 1				
Q.733.4	 	03-1993	Terminal portability (TP) <i>Published with ITU-T Q.733.2.</i>	
Q.733.5	 	12-1999	Completion of calls on no reply	





Q.734 Stage 3 description for multiparty supplementary services using Signalling System No. 7

Q.734.1	 	03-1993	Conference calling <i>Published with ITU-T Q.734.2. Covering note, June 1999: Information note</i>	
Q.734.2	 	07-1996	Three-party service	



Q.735 Stage 3 description for community of interest supplementary services using Signalling System No. 7

Q.735.1	 	03-1993	Closed user group (CUG)	
Q.735.3	 	03-1993	Multi-level precedence and preemption	
Q.735.6	 	07-1996	Global virtual network service (GVNS)	

























Q.736 Stage 3 description for charging supplementary services using Signalling System No. 7

Q.736.1	 	10-1995	International Telecommunication Charge Card (ITCC)	
Q.736.3	 	10-1995	Reverse charging (REV)	









Q.737 Stage 3 description for additional information transfer supplementary services using Signalling System No. 7














Q.737.1	 	06-1997	User-to-user signalling (UUS)	
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Q.750-Q.759: Signalling System No. 7 management











Q.750	 	06-1997	Overview of Signalling System No. 7 management	
Q.751.1	 	10-1995	Network element management information model for the Message Transfer Part (MTP)	
Q.751.2	 	06-1997	Network element management information model for the Signalling Connection Control Part	
Q.751.3	 	09-1997	Network element information model for MTP accounting	
Q.751.4	 	05-1998	Network element information model for SCCP accounting and accounting verification	
Q.752	 	06-1997	Monitoring and measurements for Signalling System No. 7 networks	
Q.753	 	06-1997	Signalling System No. 7 management functions MRVT, SRVT and CVT and definition of the OMASE-user	
Q.754	 	06-1997	Signalling System No. 7 management application service element (ASE) definitions	
Q.755	 	03-1993	Signalling System No. 7 protocol tests	
Q.755.1	 	05-1998	MTP protocol tester	
Q.755.2	 	09-1997	Transaction capabilities test responder	
Q.756	 	06-1997	Guidebook to Operations, Maintenance and Administration Part (OMAP)	

Q.760-Q.769: ISDN user part



















Q.761	 	12-1999	Signalling System No. 7 – ISDN User Part functional description	
Q.761 (1999) Amendment 1	 	07-2001		
Q.761 (1999) Amendment 2	 	12-2002	Support for the International Emergency Preference Scheme	
Q.762	 	12-1999	Signalling System No. 7 – ISDN User Part general functions of messages and signals	

Q.762 Addendum 1	 	06-2000		
Q.762 (1999) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.762 (1999) Amendment 2	 	04-2004		Pre-published.
Q.763	 	12-1999	Signalling system No. 7 – ISDN User Part formats and codes	
Q.763 (1999) Amendment 1	 	03-2001	Coding of the Application Transport Parameter	
Q.763 (1999) Corrigendum 1	 	07-2001		
Q.763 (1999) Amendment 2	 	12-2002	Support for the International Emergency Preference Scheme	
Q.763 (1999) Amendment 3	 	04-2004		
Q.764	 	12-1999	Signalling system No. 7 – ISDN User Part signalling procedures	
Q.764 (1999) Amendment 1	 	07-2001		
Q.764 (1999) Amendment 2	 	12-2002	Support for the International Emergency Preference Scheme	
Q.764 (1999) Amendment 3	 	04-2004		
Q.765	 	06-2000	Signalling system No. 7 – Application transport mechanism	
Q.765bis	 	12-1999	Signalling system No. 7 – Application transport mechanism: Test suite structure and test purposes (TSS & TP)	
Q.765.1	 	05-1998	Signalling system No. 7 – Application transport mechanism: Support of VPN applications with PSS1 information flows	
Q.765.1bis	 	12-1999	Abstract test suite for the APM support of VPN applications <i>This Recommendation includes an electronic attachment containing the ATS for ISUP'97 for APM support of VPN in machine processable form and in pdf form</i>	
Q.765.1bis (1999) Amendment 1	 	12-2000		
Q.765.4	 	06-2000	Signalling system No. 7 – Application transport mechanism: Support of the generic addressing and transport protocol	
Q.765.5	 	04-2004	Signalling system No. 7 – Application transport mechanism: Bearer Independent Call Control (BICC)	Pre-published.
Q.766	 	03-1993	Performance objectives in the integrated services digital network application	
Q.767	 	02-1991	Application of the ISDN User Part of CCITT signalling system No. 7 for international ISDN interconnections	
Q.767 (1991) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.768	 	10-1995	Signalling interface between an international switching centre and an ISDN satellite subnetwork	
Q.769.1	 	12-1999	Signalling system No. 7 – ISDN user part enhancements for the support of number portability	













Q.770-Q.779: Transaction capabilities application part





























Q.771	 	06-1997	Functional description of transaction capabilities	
Q.772	 	06-1997	Transaction capabilities information element definitions	
Q.773	 	06-1997	Transaction capabilities formats and encoding	
Q.774	 	06-1997	Transaction capabilities procedures	
Q.775	 	06-1997	Guidelines for using transaction capabilities	

Q.780-Q.799: Test specification
































Q.780	 	10-1995	Signalling System No. 7 test specification – General description	
Q.781	 	04-2002	MTP level 2 test specification	
Q.782	 	04-2002	MTP level 3 test specification	
Q.783	 	11-1988	TUP test specification	
Q.784		02-1991	ISUP basic call test specification	Available only in PDF.
Q.784 Annex A	 	03-1993	TTCN version of Recommendation Q.784	
Q.784.1	 	07-1996	ISUP basic call test specification: Validation and compatibility for ISUP'92 and Q.767 protocols	
Q.784.1 (1996) Corrigendum 1	 	12-1999		
Q.784.2	 	06-1997	ISUP basic call test specification: Abstract test suite for ISUP'92 basic call control procedures <i>This Recommendation includes one diskette containing Annex D ISUP'92 ATS for basic call in graphical and in machine processable form.</i>	
Q.784.3	 	12-1999	ISUP basic call test specification: ISUP '97 basic call control procedures – Test suite structure and test purposes (TSS & TP) <i>This Recommendation includes an electronic attachment containing the ATS for ISUP'97 basic call control procedures in machine processable form and in pdf form</i>	
Q.784.3 (1999) Amendment 1	 	12-2000		
Q.785	 	09-1991	ISUP protocol test specification for supplementary services	
Q.785.2	 	03-1999	ISUP'97 supplementary services – Test suite structure and test purposes (TSS & TP) <i>This Recommendation includes one CD-ROM containing the ISUP'97 ATS for supplementary services in machine processable form and in graphical form.</i>	
Q.785.2 (1999) Amendment 1	 	12-2000	New Appendix I – Additional test configuration for ISUP'97 supplementary services	
Q.785.2 Erratum 1		02-2002	<i>This Erratum includes an electronic attachment containing the ISUP'97 ATS for Supplementary Services version 12/1999</i>	
Q.786	 	03-1993	SCCP test specification	
Q.787	 	09-1997	Transaction capabilities (TC) test specification	
Q.788	 	06-1997	User-network-interface to user-network-interface compatibility test specifications for ISDN, non-ISDN and undetermined accesses interworking over international ISUP	
Q.795		11-1988	Operations, Maintenance and Administration Part (OMAP) <i>The content of this Recommendation is now covered by ITU-T Q.75x series</i>	Withdrawn.



























Q.800-Q.849: Q3 interface

Q.811	 	02-2004	Lower layer protocol profiles for the Q and X interfaces	Pre-published.
Q.812	 	02-2004	Upper layer protocol profiles for the Q and X interfaces	Pre-published.
Q.813	 	06-1998	Security transformations application service element for remote operations service element (STASE-ROSE)	
Q.814	 	02-2000	Specification of an electronic data interchange interactive agent	
Q.815	 	02-2000	Specification of a security module for whole message protection	
Q.816	 	01-2001	CORBA-based TMN services	

Q.816 (2001) Corrigendum 1	 	08-2001		
Q.816 (2001) Amendment 1	 	08-2001	OMG services profile	
Q.816 (2001) Amendment 2	 	05-2002	User Guide for local name resolution	
Q.816 (2001) Corrigendum 2	 	08-2002		
Q.816.1	 	08-2001	CORBA-based TMN services: Extensions to support coarse-grained interfaces	
Q.817	 	01-2001	TMN PKI – Digital certificates and certificate revocation lists profiles	
Q.821	 	02-2000	Stage 2 and Stage 3 description for the Q3 interface – Alarm Surveillance	
Q.821.1	 	09-2001	CORBA-based TMN alarm surveillance service	
Q.822	 	04-1994	Stage 1, stage 2 and stage 3 description for the Q3 interface – Performance management	
Q.822 (1994) Amendment 1	 	03-2003	Generic transport performance management	
Q.822.1	 	10-2001	CORBA-based TMN performance management service	
Q.822.1 (2001) Amendment 1	 	03-2003	Generic transport performance management	
Q.823	 	07-1996	Stage 2 and stage 3 functional specifications for traffic management	
Q.823.1	 	10-1997	Management Conformance Statement Proformas	









Q.824 Stage 2 and stage 3 description for the Q3 interface – Customer administration

Q.824.0	 	10-1995	Common information	
Q.824.1	 	10-1995	Integrated Services Digital Network (ISDN) basic and primary rate access	
Q.824.2	 	10-1995	Integrated Services Digital Network (ISDN) supplementary services	
Q.824.3	 	10-1995	Integrated Services Digital Network (ISDN) optional user facilities	
Q.824.4	 	10-1995	Integrated Services Digital Network (ISDN) teleservices	
Q.824.5	 	10-1997	Configuration management of V5 interface environments and associated customer profiles	
Q.824.5 (1997) Corrigendum 1	 	02-2000		
Q.824.6	 	06-1998	Broadband Switch Management	
Q.824.7	 	02-2000	Enhanced broadband switch management	
Q.825	 	06-1998	Specification of TMN applications at the Q3 interface: call detail recording	
Q.826		02-2000	Routing management model	Available only in PDF.
Q.831	 	10-1997	Fault and performance management of V5 interface environments and associated customer profiles	
Q.831 (1997) Corrigendum 1	 	03-2001		
Q.831.1	 	02-2000	Access Management for V5	
Q.832.1	 	06-1998	VB5.1 Management	
Q.832.1 (1998) Corrigendum 1	 	03-2001		













Q.832.2	 	03-1999	VB5.2 Management	
Q.832.3	 	01-2001	Broadband access coordination	
Q.833.1	 	01-2001	Asymmetric digital subscriber line (ADSL) – Network element management: CMIP model	
Q.834.1	 	04-2001	ATM-PON requirements and managed entities for the network element view	
Q.834.2	 	04-2001	ATM-PON requirements and managed entities for the network view	
Q.834.3	 	11-2001	A UML description for management interface requirements for broadband Passive Optical Networks	
Q.834.4	 	07-2003	A CORBA interface specification for Broadband Passive Optical Networks based on UML interface requirements <i>This edition includes the modifications introduced by Q.834.4 (2003) Cor.1 approved on 13 January 2004</i>	Pre-published.
Q.834.4 (2003) Corrigendum 1	 	01-2004		Pre-published.
Q.834.4 (2003) Amendment 1	 	01-2004		Pre-published.
Q.835	 	03-1999	Line and line circuit test management of ISDN and analogue customer accesses	
Q.835 (1999) Corrigendum 1	 	03-2001	<i>Corrigendum 1 to Recommendation Q.835</i>	
Q.836.1	 	02-2000	SSF management information model	
Q.837.1	 	02-2004	SDH-DLC functional requirements for the network and network element views	Pre-published.



Q.850-Q.999: Digital subscriber Signalling System No. 1

Q.850-Q.919: General


















Q.850	 	05-1998	Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN user part	
Q.850 Addendum 1	 	06-2000		
Q.850 (1998) Amendment 1	 	07-2001		
Q.860	 	06-2000	Integrated services digital network (ISDN) and broadband integrated services digital network (B-ISDN) generic addressing and transport (GAT) protocol	

Q.920-Q.929: Data link layer





Q.920	 	03-1993	ISDN user-network interface data link layer – General aspects <i>This Recommendation is also included but not published in I series under alias number I.440</i>	
Q.920 (1993) Amendment 1	 	06-2000		
Q.921	 	09-1997	ISDN user-network interface – Data link layer specification <i>This Recommendation is also included but not published in I series under alias number I.441.</i>	
Q.921 (1997) Amendment 1	 	06-2000		
Q.921bis	 	03-1993	Abstract test suite for LAPD conformance testing <i>This Recommendation includes 5 diskettes containing postscript files of ATS for testing conformance of basic rate user side equipment to Rec. Q.921.</i>	
Q.922	 	02-1992	ISDN data link layer specification for frame mode bearer services	

Q.923	 	02-1995	Specification of a synchronization and coordination function for the provision of the OSI connection-mode network service in an ISDN environment	
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Q.930-Q.939: Network layer



Q.930	 	03-1993	ISDN user-network interface layer 3 – General aspects <i>This Recommendation is also included but not published in I series under alias number I.450</i>	
Q.931	 	05-1998	ISDN user-network interface layer 3 specification for basic call control <i>This Recommendation is also included but not published in I series under alias number I.451</i>	
Q.931 (1998) Amendment 1	 	12-2002	Extensions for the support of digital multiplexing equipment	
Q.931 (1998) Erratum 1	 	02-2003		
Q.932	 	05-1998	Digital subscriber signalling system No. 1 – Generic procedures for the control of ISDN supplementary services <i>This Recommendation is also included but not published in I series under alias number I.452.</i>	
Q.932 (1998) Amendment 1	 	06-2000		
Q.933	 	02-2003	ISDN Digital Subscriber Signalling System No. 1 (DSS1) – Signalling specifications for frame mode switched and permanent virtual connection control and status monitoring	
Q.933 bis		10-1995	Abstract test suite – Signalling specification for frame mode basic call control conformance testing for permanent virtual connections (PVCs) <i>This Recommendation includes 1 diskette containing Abstract test suites Section II corresponding to additional procedures for PVCs as per Q.933 Annex A</i>	Available only in PDF.
Q.939	 	03-1993	Typical DSS1 service indicator codings for ISDN telecommunications services	

Q.940-Q.949: User-network management











Q.940	 	11-1988	ISDN user-network interface protocol for management – General aspects	
Q.941	 	03-1993	ISDN user-network interface protocol profile for management	

Q.950-Q.999: Stage 3 description for supplementary services using DSS1





Q.950	 	06-2000	Supplementary services protocols, structure and general principles	
Q.951 Stage 3 description for number identification supplementary services using DSS 1				
Q.951.1	 	02-1992	Direct-dialling-in (DDI) <i>Q.951 parts 1, 2 and 8 published together</i>	
Q.951.2	 	02-1992	Multiple subscriber number (MSN) <i>Q.951 parts 1, 2 and 8 published together</i>	
Q.951.3	 	03-1993	Calling line identification presentation <i>Q.951 parts 3-6 published together</i>	
Q.951.4	 	03-1993	Calling line identification restriction <i>Q.951 parts 3-6 published together</i>	
Q.951.5	 	03-1993	Connected line identification presentation <i>Q.951 parts 3-6 published together</i>	
Q.951.6	 	03-1993	Connected line identification restriction <i>Q.951 parts 3-6 published together</i>	
Q.951.7	 	06-1997	Malicious call identification (MCID)	
Q.951.8	 	02-1992	Sub-addressing (SUB) <i>Q.951 parts 1, 2 and 8 published together</i>	
Q.952	 	03-1993	Stage 3 description for call offering supplementary services using DSS1 – Diversion supplementary services	

Q.952.7	 	06-1997	Stage 3 description for call offering supplementary services using DSS1: Explicit call transfer (ECT)	
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Q.953 Stage 3 description for call completion supplementary services using DSS 1

Q.953.1	 	02-1992	Call waiting	
Q.953.2	 	03-1993	Call hold	
Q.953.3	 	06-1997	Completion of calls to busy subscribers (CCBS)	
Q.953.4	 	10-1995	Terminal Portability (TP)	
Q.953.5	 	12-1999	Call Completion on No Reply (CCNR) <i>This Recommendation includes one diskette containing the SDL process diagrams of DSS1 CCNR in machine processable form and in graphical form.</i>	





Q.954 Stage 3 description for multiparty supplementary services using DSS 1

Q.954.1	 	03-1993	Conference calling <i>Covering note, June 1999: Information note</i>	
Q.954.2	 	10-1995	Three-party service (3PTY)	



Q.955 Stage 3 description for community of interest supplementary services using DSS 1

Q.955.1	 	02-1992	Closed user group	
Q.955.3	 	03-1993	Multi-level precedence and preemption (MLPP)	

Q.956 Stage 3 description for charging supplementary services using DSS 1



Q.956.2	 	10-1995	Advice of charge	
Q.956.3	 	10-1995	Reverse charging	

Q.957 Stage 3 description for additional information transfer supplementary services using DSS 1

Q.957.1	 	07-1996	User-to-user signalling (UUS)	
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Q.1000-Q.1099: Public Land Mobile Network

Q.1000-Q.1029: General

Q.1000		11-1988	Structure of the Q.1000-Series Recommendations for public land mobile networks <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
Q.1001	 	11-1988	General aspects of public land mobile networks	
Q.1002		11-1988	Network functions <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
Q.1003		11-1988	Location registration procedures <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
Q.1004		11-1988	Location register restoration procedures <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
Q.1005		11-1988	Handover procedures <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.

Q.1030-Q.1049: Interworking with ISDN and PSTN

Q.1031		11-1988	General signalling requirements on interworking between the ISDN or PSTN and the PLMN <i>Formerly Q.70 (1984). This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the</i>	Withdrawn.
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work on mobile networks

Q.1032			11-1988	Signalling requirements relating to routing of calls to mobile subscribers <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
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Q.1050-Q.1059: Mobile Application Part









Q.1051			11-1988	Mobile application Part <i>This Recommendation was made for second generation of mobile systems. For this generation, three specifications have been developed by regional standards organizations. These implementations were complying with the philosophy of intentions of the Q.1000-Series of Recommendations, but they were modified and enhanced to include new functions and to handle regional network dependant features. These regional specifications supersede ITU-T Q.1051 (1988)</i>	Withdrawn.
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Q.1060-Q.1099: Digital PLMN user-network interfaces





Q.1061			11-1988	General aspects and principles relating to digital PLMN access signalling reference points <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
Q.1062			11-1988	Digital PLMN access signalling reference configurations <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.
Q.1063			11-1988	Digital PLMN channel structures and access capabilities at the radio interface (Um reference point) <i>This Recommendation was deleted on 24/12/2003 since it has become obsolete, due to the evolution of the work on mobile networks</i>	Withdrawn.

Q.1100-Q.1199: Interworking with satellite mobile systems





Q.1100-Q.1109: Interworking with Standard-A INMARSAT system

Q.1100	 		03-1993	Structure of the Recommendations on the INMARSAT mobile satellite systems	
Q.1101	 		11-1988	General requirements for the interworking of the terrestrial telephone network and INMARSAT Standard A system	
Q.1102	 		11-1988	Interworking between Signalling System R2 and INMARSAT Standard A system	
Q.1103	 		11-1988	Interworking between Signalling System No. 5 and INMARSAT Standard A system	





Q.1110-Q.1149: Interworking with Standard-B INMARSAT system















































Q.1111	 		03-1993	Interfaces between the INMARSAT Standard B system and the international public switched telephone network/ISDN	
Q.1112	 		03-1993	Procedures for interworking between INMARSAT Standard-B system and the international public switched telephone network/ISDN	

Q.1150-Q.1199: Interworking with the INMARSAT aeronautical mobile-satellite system











Q.1151	 		03-1993	Interfaces for interworking between the INMARSAT aeronautical mobile-satellite system and the international public switched telephone network/ISDN	
Q.1152	 		03-1993	Procedures for interworking between INMARSAT aeronautical mobile satellite system and the international public switched telephone network/ISDN	









Q.1200-Q.1699: Intelligent Network

Q.1200	 		09-1997	General series Intelligent Network Recommendation structure	
I.312/Q.1201	 		10-1992	Principles of intelligent network architecture	















































				<i>This Recommendation is published with the double number Q.1201 and I.312</i>	
I.328/Q.1202	 	09-1997		Intelligent network – Service plane architecture <i>This Recommendation is published with the double number Q.1202 and I.328</i>	
I.329/Q.1203	 	09-1997		Intelligent network – Global functional plane architecture <i>This Recommendation is published with the double number Q.1203 and I.329. For more details see I.329</i>	
Q.1204	 	03-1993		Intelligent network distributed functional plane architecture	
Q.1205	 	03-1993		Intelligent network physical plane architecture	
Q.1208	 	09-1997		General aspects of the intelligent network application protocol	
Q.1210	 	10-1995		Q.1210-series intelligent network Recommendation structure	
Q.1211	 	03-1993		Introduction to intelligent network capability set 1	
Q.1213	 	10-1995		Global functional plane for intelligent network CS-1	
Q.1214		10-1995		Distributed functional plane for intelligent network CS-1	Available only in PDF.
Q.1215	 	10-1995		Physical plane for intelligent network CS-1	
Q.1218	 	10-1995		Interface Recommendation for intelligent network CS-1	
Q.1218 Addendum 1	 	09-1997		Definition for two new contexts in the SDF data model	
Q.1219	 	04-1994		Intelligent network user's guide for Capability Set 1	
Q.1220	 	09-1997		Q.1220-Series intelligent network Capability Set 2 Recommendation structure	
Q.1221	 	09-1997		Introduction to intelligent network Capability Set 2	
Q.1222	 	09-1997		Service plane for intelligent network Capability Set 2	
Q.1223	 	09-1997		Global functional plane for intelligent network Capability Set 2	
Q.1224	 	09-1997		Distributed functional plane for intelligent network Capability Set 2 <i>This Recommendation is published in three fascicles.</i>	
Q.1225	 	09-1997		Physical plane for intelligent network Capability Set 2	
Q.1228	 	09-1997		Interface Recommendation for intelligent network Capability Set 2 <i>This Recommendation includes 3 diskettes containing Q.1228 SDL diagrams in SDT source format and in PDF format.</i>	
Q.1229	 	03-1999		Intelligent Network user's guide for Capability Set 2	
Q.1231	 	12-1999		Introduction to Intelligent Network Capability Set 3	
Q.1236	 	12-1999		Intelligent Network Capability Set 3 – Management Information Model Requirements and Methodology	
Q.1237		06-2000		Extensions to Intelligent Network Capability Set 3 in support of B-ISDN	Available only in PDF.

Q.1238 Interface Recommendation for intelligent network capability set 3





Q.1238.1	 	06-2000		Common aspects <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 common aspects</i>	
Q.1238.2	 	06-2000		SCF-SSF interface <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions and the SDL diagrams in machine processable forms and in pdf form for SCF-SFF interface</i>	
Q.1238.3	 	06-2000		SCF-SRF interface <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-SRF interface</i>	
Q.1238.4	 	06-2000		SCF-SDF interface <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-SDF interface</i>	
Q.1238.5	 	06-2000		SDF-SDF interface <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SDF-SDF interface</i>	

























Q.1238.6	 	06-2000	SCF-SCF interface <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-SCF interface</i>
Q.1238.7	 	06-2000	SCF-CUSF interface <i>This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-CUSF interface</i>
Q.1241	 	07-2001	Introduction to Intelligent Network Capability Set 4
Q.1244	 	07-2001	Distributed functional plane for Intelligent Network Capability Set 4

Q.1248 Interface Recommendation for Intelligent Network Capability Set 4








Q.1248.1	 	07-2001	Common aspects
Q.1248.2	 	07-2001	SCF-SSF interface
Q.1248.3	 	07-2001	SCF-SRF interface
Q.1248.4	 	07-2001	SCF-SDF interface
Q.1248.5	 	07-2001	SDF-SDF interface
Q.1248.6	 	07-2001	SCF-SCF interface
Q.1248.7	 	07-2001	SCF-CUSF interface
Q.1290	 	05-1998	Glossary of terms used in the definition of intelligent networks
Q.1300	 	10-1995	Telecommunication applications for switches and computers (TASC) – General overview
Q.1301	 	10-1995	Telecommunication applications for switches and computers (TASC) – TASC Architecture
Q.1302	 	10-1995	Telecommunication applications for switches and computers (TASC) – TASC functional services
Q.1303	 	10-1995	Telecommunication applications for switches and computers (TASC) – TASC Management: Architecture, methodology and requirements
Q.1400	 	03-1993	Architecture framework for the development of signalling and OA&M protocols using OSI concepts
Q.1400 Addendum 1	 	02-1995	
Q.1521	 	06-2000	Requirements on underlying networks and signalling protocols to support UPT
Q.1531	 	06-2000	UPT security requirements for Service Set 1
Q.1541	 	05-1998	UPT stage 2 for Service Set 1 on IN CS-1 – Procedures for universal personal telecommunication: Functional modelling and information flows
Q.1542	 	06-2000	UPT stage 2 for Service Set 1 on IN CS-2 – Procedures for universal personal telecommunication: Functional modelling and information flows
Q.1551	 	06-1997	Application of Intelligent Network Application Protocols (INAP) CS-1 for UPT service set 1
Q.1600	 	09-1997	Signalling System No. 7 – Interaction between ISUP and INAP
Q.1600bis	 	12-1999	Signalling system No. 7 – Interaction between ISDN user part ISUP '97 and INAP CS-1: Test suite structure and test purposes (TSS & TP) <i>This Recommendation includes an electronic attachment containing the ATS in machine processable form and in pdf form for ISUP'97/INAP CS-1 interaction</i>
Q.1600bis (1999) Amendment 1	 	12-2000	
Q.1601	 	12-1999	Signalling system No. 7 – Interaction between N-ISDN and INAP CS-2
































Q.1700-Q.1799: Signalling requirements and protocols for IMT-2000

Q.1701	 	03-1999	Framework for IMT-2000 networks
Q.1702	 	06-2002	Long-term vision of network aspects for systems beyond IMT-2000

Q.1711	 	03-1999	Network functional model for IMT-2000	
Q.1721	 	06-2000	Information flows for IMT-2000 capability set 1	
Q.1731	 	06-2000	Radio-technology independent requirements for IMT-2000 layer 2 radio interface	
Q.1741.1	 	04-2002	IMT-2000 references to release 1999 of GSM evolved UMTS core network with UTRAN access network	
Q.1741.2	 	12-2002	IMT-2000 references to release 4 of GSM evolved UMTS core network with UTRAN access network	
Q.1741.3	 	09-2003	IMT-2000 references to release 5 of GSM evolved UMTS core network	
Q.1742.1	 	12-2002	IMT-2000 references to ANSI-41 evolved core network with cdma2000 access network	
Q.1742.2	 	07-2003	IMT-2000 references (approved as of 11 July 2002) to ANSI-41 evolved core network with cdma2000 access network	
Q.1742.2 (2003) Erratum 1	 	03-2004		
Q.1742.3	 	01-2004	IMT-2000 references (approved as of 30 June 2003) to ANSI-41 evolved core network with cdma2000 access network	Pre-published.
Q.1751	 	06-2000	Internetwork signalling requirements for IMT-2000 capability set 1	
Q.1761	 	01-2004	Principles and requirements for convergence of fixed and existing IMT-2000 systems	Pre-published.



Q.1900-Q.1999: Specifications of signalling related to Bearer Independent Call Control (BICC)

Q.1901	 	06-2000	Bearer Independent Call Control protocol	
Q.1901 (2000) Corrigendum 1	 	04-2002		
Q.1902.1	 	07-2001	Bearer Independent Call Control protocol (Capability Set 2): Functional description	
Q.1902.1 (2001) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.1902.2	 	07-2001	Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No.7 ISDN User Part: General functions of messages and parameters	
Q.1902.2 (2001) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.1902.2 (2001) Amendment 2	 	04-2004		
Q.1902.3	 	07-2001	Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No.7 ISDN User Part: Formats and codes	
Q.1902.3 (2001) Cor.1		04-2002	<i>Not published, directly consolidated with ITU-T Q.1902.3 (07/2001) text</i>	
Q.1902.3 (2001) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.1902.3 (2001) Amendment 2	 	04-2004		
Q.1902.4	 	07-2001	Bearer Independent Call Control protocol (Capability Set 2): Basic call procedures	
Q.1902.4 (2001) Cor.1		04-2002	<i>Not published, directly consolidated with ITU-T Q.1902.4 (07/2001) text</i>	















Q.1902.4 (2001) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.1902.4 (2001) Amendment 2	 	04-2004		Pre-published.
Q.1902.5	 	07-2001	Bearer Independent Call Control protocol (Capability Set 2): Exceptions to the Application transport mechanism in the context of BICC	
Q.1902.6	 	07-2001	Bearer Independent Call Control protocol (Capability Set 2): Generic signalling procedures for the support of the ISDN User Part supplementary services and for bearer redirection	
Q.1902.6 (2001) Amendment 1	 	04-2004		
Q.1912.1	 	07-2001	Interworking between Signalling System No. 7 ISDN user part and the Bearer Independent Call Control protocol	
Q.1912.2	 	07-2001	Interworking between selected signalling systems (PSTN access, DSS1, C5, R1, R2, TUP) and the Bearer Independent Call Control protocol	
Q.1912.3	 	07-2001	Interworking between H.323 and the Bearer Independent Call Control protocol	
Q.1912.4	 	07-2001	Interworking between Digital Subscriber Signalling System No. 2 and the Bearer Independent Call Control protocol	
Q.1912.5	 	03-2004	Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control protocol or ISDN User Part	Pre-published.
Q.1922.2	 	07-2001	Interaction between the Intelligent Network Application Protocol Capability Set 2 and the Bearer Independent Call Control protocol	
Q.1922.4	 	12-2002	Interaction between the Intelligent Network application CS-4 protocol and the Bearer Independent Call Control protocol	
Q.1930	 	04-2002	BICC access network protocol	
Q.1950	 	12-2002	Bearer independent call bearer control protocol	
Q.1970	 	07-2001	BICC IP Bearer control protocol	
Q.1990	 	07-2001	BICC Bearer Control Tunnelling Protocol	

Q.2000-Q.2999: Broadband ISDN





















Q.2000-Q.2099: General aspects

Q.2010	 	02-1995	Broadband integrated services digital network overview – Signalling capability set 1, release 1	
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Q.2100-Q.2199: Signalling ATM adaptation layer (SAAL)

Q.2100	 	07-1994	B-ISDN signalling ATM adaptation layer (SAAL) – Overview description	
Q.2110	 	07-1994	B-ISDN ATM adaptation layer – Service specific connection oriented protocol (SSCOP)	
Q.2111	 	12-1999	B-ISDN ATM adaptation layer – Service specific connection oriented protocol in a multi-link and connectionless environment (SSCOPMCE)	
Q.2111 (1999) Amendment 1	 	07-2001		
Q.2111 (1999) Amendment 2	 	04-2002	API for SSCOPMCE over Ethernet	
Q.2111 (1999) Amendment 3	 	10-2003	API for SSCOPMCE over Ethernet and UDP port number	
Q.2111 (1999)	 	03-2004		





















**Amendment 2
Erratum 1**

Q.2119	 	07-1996	B-ISDN ATM adaptation layer – Convergence function for SSCOP above the frame relay core service	
Q.2120	 	02-1995	B-ISDN meta-signalling protocol	
Q.2130	 	07-1994	B-ISDN signalling ATM adaptation layer – Service specific coordination function for support of signalling at the user-network interface (SSCF at UNI)	
Q.2140	 	02-1995	B-ISDN ATM adaptation layer – Service specific coordination function for signalling at the network node interface (SSCF at NNI)	
Q.2140 (1995) Erratum 1	 	03-2004		
Q.2144	 	10-1995	B-ISDN signalling ATM adaptation layer – Layer management for the SAAL at the network node interface	
Q.2150.0	 	05-2001	Generic signalling transport service	
Q.2150.1	 	05-2001	Signalling transport converter on MTP3 and MTP3b	
Q.2150.2	 	05-2001	Signalling transport converter on SSCOP and SSCOPMCE	
Q.2150.3	 	12-2002	Signalling transport converter on SCTP	





Q.2200-Q.2299: Signalling network protocols

Q.2210	 	07-1996	Message transfer part level 3 functions and messages using the services of ITU-T Recommendation Q.2140	
Q.2220	 	12-2002	Transport-Independent Signalling Connection Control Part (TI-SCCP)	




Q.2600-Q.2699: Common aspects of B-ISDN application protocols for access signalling and network signalling and interworking





















Q.2610	 	12-1999	Usage of cause and location in B-ISDN user part and DSS2	
Q.2630.1	 	12-1999	AAL type 2 signalling protocol – Capability Set 1	
Q.2630.1 Annex B	 	03-2001	SDL definition of the AAL type 2 signalling protocol CS-1	
Q.2630.2	 	12-2000	AAL type 2 signalling protocol – Capability Set 2	
Q.2630.2 Annex D	 	04-2002	SDL definition of the AAL type 2 signalling protocol CS-2	
Q.2630.3	 	10-2003	AAL type 2 signalling protocol – Capability Set 3	
Q.2631.1	 	10-2003	IP connection control signalling protocol - Capability Set 1	
Q.2632.1	 	10-2002	Interworking between AAL type 2 signalling protocol Capability Set 2 and IP connection control signalling protocol Capability Set 1	
Q.2650	 	12-1999	Interworking between signalling system No. 7 broadband ISDN User Part (B-ISUP) and digital subscriber signalling system No. 2 (DSS2)	
Q.2660	 	12-1999	Interworking between signalling system No. 7 broadband ISDN user part (B-ISUP) and narrow-band ISDN user part (N-ISUP)	

Q.2700-Q.2899: B-ISDN application protocols for the network signalling























Q.2721.1		07-1996	B-ISDN user part – Overview of the B-ISDN network node interface signalling capability set 2, step 1 <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2722.1	 	07-1996	B-ISDN user part – Network node interface specification for point-to-multipoint call/connection control	
Q.2722.1 (1996) Amendment 1	 	06-2000		
Q.2723.1		07-1996	B-ISDN user part – Support of additional traffic parameters for sustainable cell rate and quality of service <i>The contents of this Rec. is now covered by ITU-T Recs. O.2761.</i>	Withdrawn.

Q.2762, Q.2763 and Q.2764 approved in 12/1999



Q.2723.2			09-1997	Extensions to the B-ISDN User Part – Support of ATM transfer capability in the broadband bearer capability parameter <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2723.3			09-1997	Extensions to the B-ISDN User Part – Signalling capabilities to support traffic parameters for the available bit rate (ABR) ATM transfer capability <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2723.4			09-1997	Extensions to the B-ISDN User Part – Signalling capabilities to support traffic parameters for the ATM block transfer (ABT) ATM transfer capability <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2723.5			03-1999	B-ISDN User Part – Support of cell delay variation tolerance indication <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2723.6			05-1998	Extensions to the signalling system no. 7 B-ISDN user part – Signalling capabilities to support the indication of the statistical bit rate configuration 2 (SBR 2) and 3 (SBR 3) ATM transfer capabilities <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2724.1	 		07-1996	B-ISDN user part – Look-ahead without state change for the network node interface	
Q.2725.1			05-1998	B-ISDN user part – Support of negotiation during connection setup <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2725.2			07-1996	B-ISDN user part – Modification procedures <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2725.3			09-1997	Extensions to the B-ISDN User Part – Modification procedures for sustainable cell rate parameters <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2725.4			05-1998	Extensions to the signalling system No. 7 B-ISDN user part – Modification procedures with negotiation <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2726.1			07-1996	B-ISDN user part – ATM end system address <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2726.2	 		07-1996	B-ISDN user part – Call priority	
Q.2726.3	 		07-1996	B-ISDN user part – Network generated session identifier	
Q.2726.4	 		06-2000	Extensions to the B-ISDN User Part – Application generated identifiers	
Q.2727			07-1996	B-ISDN user part – Support of frame relay <i>The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999</i>	Withdrawn.
Q.2730	 		12-1999	Signalling system No. 7 B-ISDN user part (B-ISUP) – Supplementary services	
Q.2735 Stage 3 description for community of interest supplementary services for B-ISDN using SS No. 7					
Q.2735.1	 		06-1997	Closed User Group (CUG)	
Q.2751.1	 		09-1997	Extension of Q.751.1 for SAAL signalling links	
Q.2761	 		12-1999	Functional description of the B-ISDN user part (B-ISUP) of signalling system No. 7	
Q.2761 (1999) Amendment 1	 		12-2002	Support for the International Emergency Preference Scheme	
Q.2762	 		12-1999	General functions of messages and signals of the B-ISDN User Part (B-ISUP) of Signalling System No. 7	

Q.2762 (1999) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.2763	 	12-1999	Signalling System No. 7 B-ISDN User Part (B-ISUP) – Formats and codes	
Q.2763 (1999) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	Pre-published.
Q.2764	 	12-1999	Signalling System No. 7 B-ISDN User Part (B-ISUP) – Basic call procedures	
Q.2764 (1999) Amendment 1	 	12-2002	Support for the International Emergency Preference Scheme	
Q.2765	 	12-1999	Signalling System No. 7 B-ISDN User Part (B-ISUP) – Application transport mechanism (APM)	
Q.2766.1	 	05-1998	Switched virtual path capability	
Q.2766.1 (1998) Amendment 1	 	06-2000		
Q.2767.1	 	06-2000	Soft PVC capability	
Q.2769.1	 	06-2000	Support of number portability information across B-ISUP	















Q.2900-Q.2999: B-ISDN application protocols for access signalling

Q.2920	 	12-2003	Broadband integrated services digital network (B-ISDN) – Digital Subscriber Signalling System No. 2 (DSS 2): Call/connection control for the support of ATM-MPLS network interworking	
Q.2931	 	02-1995	Digital Subscriber Signalling System No. 2 – User-Network Interface (UNI) layer 3 specification for basic call/connection control <i>Modified by ITU-T Q.2971 (10/1995).</i>	
Q.2931 (1995) Amendment 1	 	06-1997		
Q.2931 (1995) Amendment 2	 	03-1999		
Q.2931 (1995) Amendment 3	 	03-1999		
Q.2931 (1995) Amendment 4	 	12-1999		
Q.2931 (1995) Amendment 2 Corrigendum 1	 	06-2000		
Q.2931B	 	12-2000	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Protocol implementation conformance statement (PICS) proforma	
Q.2931C	 	12-2000	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Test suite structure and test purposes (TSS & TP) for the user	
Q.2931D	 	12-2000	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the user	
Q.2931E	 	12-2000	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface	



















(UNI) layer 3 specification for basic call/connection control: Test suite structure and test purposes (TSS & TP) for the network

Q.2931F	 	12-2000	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network
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Q.2932 Digital subscriber signalling system No. 2 – Generic functional protocol

Q.2932.1	 	07-1996	Core functions
Q.2933	 	07-1996	Digital subscriber signalling system No. 2 – Signalling specification for frame relay service
Q.2934	 	05-1998	Digital subscriber signalling system No. 2 – Switched virtual path capability
Q.2939.1	 	09-1997	Digital Subscriber Signalling System No. 2 – Application of DSS2 service-related information elements by equipment supporting B-ISDN services
Q.2941.1	 	09-1997	Digital Subscriber Signalling System No. 2 – Generic identifier transport
Q.2941.2	 	12-1999	Digital Subscriber Signalling System No. 2 – Generic identifier transport extensions
Q.2941.3	 	06-2000	Digital Subscriber Signalling System No. 2 – Generic identifier transport extension for support of bearer independent call control







Q.2951 Stage 3 description for number identification supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS2) – Basic Call

Q.2951 (1995) Corrigendum 1	 	05-1998	
Q.2951.1-8	 	02-1995	Direct-Dialling-In (DDI)
Q.2951.1-8	 	02-1995	Multiple Subscriber Number (MSN)
Q.2951.1-8	 	02-1995	Calling Line Identification Presentation (CLIP)
Q.2951.1-8	 	02-1995	Calling Line Identification Restriction (CLIR)
Q.2951.1-8	 	02-1995	Connected Line Identification Presentation (COLP)
Q.2951.1-8	 	02-1995	Connected Line Identification Restriction (COLR)
Q.2951.1-8	 	02-1995	Sub-addressing (SUB)
Q.2951.9	 	12-1999	Support of ATM end system addressing format by Number identification supplementary services



Q.2955 Stage 3 description for community of interest supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS2)

Q.2955.1	 	06-1997	Closed User Group (CUG)
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Q.2957 Stage 3 description for additional information transfer supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS2) – Basic call









Q.2957.1	 	02-1995	User-to-user signalling (UUS) <i>Modified by ITU-T Q.2971 (10/1995).</i>
Q.2957.1 (1995) Amendment 1	 	12-1999	
Q.2959	 	07-1996	Digital subscriber signalling system No. 2 – Call priority



































Q.2961 Digital subscriber signalling system No. 2 – Additional traffic parameters

Q.2961B	 	12-2000	Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Protocol implementation conformance statement (PICS) proforma
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Q.2961C	 	12-2000	Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Test suite structure and test purposes (TSS & TP) for the user
Q.2961D	 	12-2000	Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the user
Q.2961E	 	12-2000	Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Test suite structure and test purposes (TSS & TP) for the network
Q.2961F	 	12-2000	Digital subscriber signalling system No. 2 (DSS2) – Additional traffic parameters: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the Network
Q.2961.1	 	10-1995	Additional signalling capabilities to support traffic parameters for the tagging option and the sustainable cell rate parameter set
Q.2961.2	 	06-1997	Support of ATM Transfer capability in the broadband bearer capability information element
Q.2961.2 (1997) Corrigendum 1	 	03-1999	
Q.2961.3	 	09-1997	Signalling capabilities to support traffic parameters for the available bit rate (ABR) ATM transfer capability
Q.2961.4	 	09-1997	Signalling capabilities to support traffic parameters for the ATM Block Transfer (ABT) ATM transfer capability
Q.2961.5	 	03-1999	Additional traffic parameters for cell delay variation tolerance indication
Q.2961.6	 	05-1998	Additional signalling procedures for the support of the SBR2 and SBR3 ATM transfer capabilities
Q.2962	 	05-1998	Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase
Q.2962B	 	12-2000	Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Protocol Implementation Conformance Statement (PICS) proforma
Q.2962C	 	12-2000	Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Test suite structure and test purposes (TSS & TP) for the user
Q.2962D	 	12-2000	Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the user
Q.2962E	 	12-2000	Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Test suite structure and test purposes (TSS & TP) for the network
Q.2962F	 	12-2000	Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Abstract test suite (ATS) and partial protocol Implementation extra information for testing (PIXIT) proforma for the network

Q.2963 Digital subscriber signalling system No. 2 – Connection modification





Q.2963.1	 	12-1999	Peak cell rate modification by the connection owner
Q.2963.1B	 	12-2000	Peak cell rate modification by the connection owner: Protocol implementation conformance statement (PICS) proforma <i>ITU-T Q.2963.1 B was previously numbered as Q.2963.1 bis during the approval process</i>
Q.2963.1C	 	12-2000	Peak cell rate modification by the connection owner: Test suite structure and test purposes (TSS & TP) for the user <i>ITU-T Q.2963.1 C was previously numbered as Q.2963.1 ter during the approval process</i>
Q.2963.1D	 	12-2000	Peak cell rate modification by the connection owner: Abstract test suite (ATS) and partial protocol implementation extra information for

				testing (PIXIT) proforma for the user <i>ITU-T Q.2963.1 D was previously numbered as Q.2963.1 quater during the approval process</i>	
Q.2963.1E			12-2000	Peak cell rate modification by the connection owner: Test suite structure and test purposes (TSS & TP) for the network <i>ITU-T Q.2963.1 E was previously numbered as Q.2963.1 quinques during the approval process</i>	
Q.2963.1F			12-2000	Peak cell rate modification by the connection owner: Abstract test suite (ATS) and partial protocol implementation extra information for testing (PIXIT) proforma for the network <i>ITU-T Q.2963.1 F was previously numbered as Q.2963.1 sexes during the approval process</i>	
Q.2963.2			09-1997	Modification procedures for sustainable cell rate parameters	
Q.2963.3			05-1998	ATM traffic descriptor modification with negotiation by the connection owner	
Q.2964.1			07-1996	Digital subscriber signalling system No. 2 – Basic look-ahead	
Q.2965.1			03-1999	Digital subscriber signalling system No. 2 – Support of Quality of Service classes	
Q.2965.1 (1999) Amendment 1			06-2000		
Q.2965.1B			12-2000	Digital subscriber signalling system No. 2 – Support of Quality of Service classes: Protocol Implementation Conformance Statement (PICS) proforma <i>ITU-T Q.2965 B was previously numbered as Q.2965.1 bis during the approval process</i>	
Q.2965.2			12-1999	Digital subscriber signalling system No. 2 – Signalling of individual Quality of Service parameters	
Q.2965.2B			12-2000	Digital subscriber signalling system No. 2 – Signalling of individual Quality of Service parameters: Protocol Implementation Conformance Statement (PICS) proforma <i>ITU-T Q.2965 B was previously numbered as Q.2965.2 bis during the approval process</i>	
Q.2971			10-1995	Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control <i>Modifies ITU-T Q.2931, Q.2951 and Q.2957.</i>	
Q.2971 (1999) Corrigendum 1			12-1999		
Q.2971C			12-1999	Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Test Suite Structure and Test Purposes (TSS & TP) for the user <i>ITU-T Q.2971 C was previously numbered as Q.2971 ter during the approval process</i>	
Q.2971D			12-1999	Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra information for testing (PIXIT) proforma for the user <i>ITU-T Q.2971 D was previously numbered as Q.2971 quater during the approval process</i>	
Q.2971E			12-1999	Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Test Suite Structure and Test Purposes (TSS & TP) for the network <i>ITU-T Q.2971 E was previously numbered as Q.2971 quinques during the approval process</i>	
Q.2971F			12-1999	Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network <i>ITU-T Q.2971 F was previously numbered as Q.2971 sexes during the approval process</i>	
Q.2981			12-1999	Broadband integrated services digital network (B-ISDN) and broadband private integrated services network (B-PISN) – Call control	






























protocol

Q.2982	 	12-1999	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – Q.2931-based separated call control protocol
Q.2983	 	12-1999	Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS2) – Bearer control protocol
Q.2984	 	12-1999	Broadband integrated services digital network (B-ISDN) and broadband private integrated services network (B-PISN) – Prenegotiation















Q.2991 Abstract test suite for the network integration testing for B-ISDN and B-ISDN/N-ISDN

Q.2991.1	 	12-1999	TSS & TP <i>This Recommendation includes an electronic attachment containing Test Purpose list for network integration testing</i>
Q.2991.2	 	12-1999	ICS & IXIT and ATS <i>This Recommendation includes an electronic attachment containing the ATS in machine processable form and in pdf form for network integration testing</i>

Q-Series: Supplements to the Series Q Recommendations











Q-500 series Suppl. 1		11-1988	Definition of relative levels, transmission loss and attenuation/frequency distortion for digital exchanges with complex impedances at Z interfaces <i>Available in paper format only.</i>	
Q-500 series Suppl. 2		11-1988	Impedance strategy for telephone instruments and digital local exchanges in the British Telecom Network <i>Available in paper format only.</i>	
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Q.Sup4	 	05-1998	Number portability – Capability set 1 requirements for service provider portability (All call query and Onward routing)	
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Q.Sup8	 	03-1999	Technical Report TRQ.2400: Transport control signalling requirements – Signalling requirements for AAL Type 2 link control capability set 1	
Q.Sup9	 	03-2004	Technical Report TRQ.2000: Roadmap for the TRQ.2xxx-series Technical Reports	Pre-published.
Q.Sup10	 	12-1999	Technical Report TRQ.2002: Information flow elements	
Q.Sup11	 	12-1999	Technical Report TRQ.2010: B-ISDN signalling interworking requirements	
Q.Sup12	 	12-1999	Technical Report TRQ.2100: Coordinated call control and bearer control signalling requirements – Root-party coordinated call and bearer control	
Q.Sup13	 	12-1999	Technical Report TRQ.2110: Coordinated call control and bearer control signalling requirements – Leaf-party coordinated call and bearer control	
Q.Sup14	 	12-1999	Technical Report TRQ.2120: Coordinated call control and bearer control signalling requirements – Third-party coordinated call and bearer control	
Q.Sup15	 	12-1999	Technical Report TRQ.2130: Coordinated call control and bearer control signalling requirements for leaf initiated join service	
Q.Sup16	 	12-1999	Technical Report TRQ.2140: Signalling requirements for the support of narrowband services via broadband transport technologies	
Q.Sup17	 	12-1999	Technical Report TRQ.2200: Call control signalling requirements –	

				Party call control	
Q.Sup18			12-1999	Technical Report TRQ.2230: Call control signalling requirements – Join call service	
Q.Sup19			12-1999	Technical Report TRQ.2300: Bearer control signalling requirements – Root-party bearer control	
Q.Sup20			12-1999	Technical Report TRQ.2310: Bearer control signalling requirements – Leaf-party bearer control	
Q.Sup21			12-1999	Technical Report TRQ.2320: Bearer control signalling requirements – Third-party bearer control	
Q.Sup22			12-1999	Technical Report TRQ.3000: Operation of the bearer independant call control (BICC) protocol with digital subscriber signalling system No. 2 (DSS2)	
Q.Sup23			12-1999	Supplement to ITU-T Q.1901 Recommendation – Technical Report TRQ.3010: Operation of the bearer independant call control (BICC) protocol with AAL type 2 signalling protocol (CS-1)	
Q.Sup24			12-1999	Technical Report TRQ.3020: Operation of the bearer independant call control (BICC) protocol with broadband integrated services digital network user part (B-ISUP) for AAL Type 1 adaptation	
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Q.Sup27			12-1999	Technical Report – Overview of Signalling and Protocol Framework for an Emerging Environment (SPFEE)	
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Q.Sup31			12-2000	Technical Report TRQ.2141.0: Signalling requirements for the support of narrow-band services over broadband transport technologies – Capability set 2 (CS-2)	
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Q.Sup33			12-2000	Technical Report TRQ.2401: Transport control signalling requirements – Signalling requirements for AAL type 2 link control capability set 2	
Q.Sup34			12-2000	Technical Report TRQ.2410: Signalling Requirements Capability Set 1 for the support of IP Bearer Control in BICC networks	
Q.Sup35			12-2000	Technical Report TRQ.2500: Signalling Requirements for the support of the call bearer control interface (CS-1)	
Q.Sup36			12-2000	Technical Report TRQ.3030: Operation of the bearer independent call control (BICC) protocol (CS-2) with IP bearer control protocol (IPBCP)	
Q.Sup37			12-2000	DSS1 and DSS2 Messages and information element identifiers	
Q.Sup38			05-2001	Technical Report TRQ.2600: BICC signalling transport requirements – Capability set 1	
Q.Sup39			03-2002	Technical Report TRQ.2700: Requirements for signalling in access networks that support BICC	
Q.Sup40			11-2002	Technical Report: Reference document on API/object interface between network control and application layer	
Q.Sup41			11-2002	Technical Report TRQ.2003: Roadmap to the BICC protocol Recommendations, BICC interworking Recommendations, and BICC requirement Supplements	
Q.Sup42			09-2003	Technical Report TRQ.2402: Transport control signalling requirements – Signalling requiremnts for AAL type 2 link control Capability Set 3	
Q.Sup43			09-2003	Technical Report TRQ.2415: Transport control signalling requirements – Sianalling requirements for IP connection control in radio access	

























			networks Capability Set 1	
Q.Sup44	 	09-2003	Technical Report TRQ.2800: Transport control signalling requirements – Signalling requirements for AAL type 2 to IP interworking Capability Set 1	
Q.Sup45	 	09-2003	Technical Report TRQ.2815: Requirements for interworking BICC/ISUP network with originating/destination networks based on Session Initiation Protocol and Session Description Protocol	
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Q.Sup49	 	03-2004	Technical Report TRQ.2840: Signalling requirements to support IP telephony	Pre-published.
Q.Sup50	 	03-2004	Technical Report TRQ.2145: Requirements for a Narrowband Signalling Syntax (NSS)	Pre-published.

Series R: Telegraph transmission









R.1-R.19: Telegraph distortion

R.2	 	11-1988	Element error rate
R.4	 	11-1988	Methods for the separate measurements of the degrees of various types of telegraph distortion
R.5	 	03-1993	Observation conditions recommended for routine distortion measurements on international telegraph circuits
R.9	 	03-1993	How the laws governing distribution of distortion should be arrived at
R.11	 	03-1993	Calculation of the degree of distortion of a telegraph circuit in terms of the degrees of distortion of the component links













R.20-R.39: Voice-frequency telegraphy













R.20	 	11-1988	Telegraph modem for subscriber lines
R.21	 	08-1996	9600 bit/s modem standardized for use in the telegraph TDM system
R.22	 	08-1996	Data over voice 19 200 bit/s modem standardized for use on telephone network subscriber lines
R.30	 	11-1988	Transmission characteristic for international VFT links
R.31	 	11-1988	Standardization of AMVFT systems for a modulation rate of 50 bauds
R.35	 	11-1988	Standardization of FMVFT systems for a modulation rate of 50 bauds
R.35bis	 	11-1988	50-baud wideband VFT systems
R.36	 	11-1988	Coexistence of 50-baud/120-Hz channels, 100-baud/240-Hz channels, 200-baud/360-Hz or 480-Hz channels on the same voice-frequency telegraph system
R.37	 	11-1988	Standardization of FMVFT systems for a modulation rate of 100 bauds
R.38 A	 	11-1988	Standardization of FMVFT system for a modulation rate of 200 bauds with channels spaced at 480 Hz
R.38B	 	11-1988	Standardization of FMVFT systems for a modulation rate of 200 bauds with channels spaced at 360 Hz usable on long intercontinental bearer circuits generally used with a 3-kHz spacing
R.39	 	11-1988	Voice-frequency telegraphy on radio circuits

R.40-R.49: Special cases of alternating current telegraphy





R.40	 	11-1988	Coexistence in the same cable of telephony and super-telephone telegraphy
R.43	 	11-1988	Simultaneous communication by telephone and telegraph on a telephone-type circuit
R.44	 	11-1988	6-unit synchronous time-division 2-3-channel multiplex telegraph system for use over FMVFT channels spaced at 120 Hz for connection to standardized teleprinter networks
R.49	 	11-1988	Interband telegraphy over open-wire 3-channel carrier systems

R.50-R.59: Transmission quality

R.50	 	11-1988	Tolerable limits for the degree of isochronous distortion of code-independent 50-baud telegraph circuits
R.51	 	11-1988	Standardized text for distortion testing of the code-independent elements of a complete circuit
R.51bis	 	11-1988	Standardized text for testing the elements of a complete circuit
R.52	 	11-1988	Standardization of international texts for the measurement of the margin of start-stop equipment
R.53	 	11-1988	Permissible limits for the degree of distortion on an international 50-baud/120-Hz VFT channel (frequency and amplitude modulation)
R.54	 	03-1993	Conventional degree of distortion tolerable for standardized start-stop 50-baud systems

R.55	 	03-1993	Conventional degree of distortion
R.56	 	03-1993	Telegraph distortion limits to be quoted in Recommendations for equipment and transmission plans
R.57	 	11-1988	Standard limits of transmission quality for planning code-independent international point-to-point telegraph communications and switched networks using 50-baud start-stop equipment
R.58	 	11-1988	Standard limits of transmission quality for the gentex and telex networks
R.58bis	 	11-1988	Limits on signal transfer delay for telegraph, telex and gentex networks
R.59	 	11-1988	Interface requirements for 50-baud start-stop telegraph transmission in the maritime mobile satellite service









R.60-R.69: Correction of signals





















R.60	 	11-1988	Conditions to be fulfilled by regenerative repeaters for start-stop signals of International Telegraph Alphabet No. 2
R.62	 	11-1988	Siting of regenerative repeaters in international telex circuits

R.70-R.99: Telegraph maintenance







R.70	 	11-1988	Designation of international telegraph circuits
R.70bis	 	11-1988	Numbering of international VFT channels
R.71	 	11-1988	Organization of the maintenance of international telegraph circuits
R.72	 	11-1988	Periodicity of maintenance measurements to be carried out on the channels of international VFT systems
R.73	 	11-1988	Maintenance measurements to be carried out on VFT systems
R.74	 	11-1988	Choice of type of telegraph distortion-measuring equipment
R.75	 	11-1988	Maintenance measurements on code-independent international sections of international telegraph circuits
R.75bis	 	11-1988	Maintenance measurements of character error rate on international sections of international telegraph circuits
R.76	 	11-1988	Reserve channels for maintenance measurements on channels of international VFT systems
R.77	 	11-1988	Use of bearer circuits for voice-frequency telegraphy
R.78	 	11-1988	Pilot channel for AMVFT systems
R.79	 	11-1988	Automatic tests of transmission quality on telegraph circuits between switching centres
R.80	 	11-1988	Causes of disturbances to signals in VFT channels and their effect on telegraph distortion
R.81	 	11-1988	Maximum acceptable limit for the duration of interruption of telegraph channels arising from failure of the normal power supplies
R.82	 	11-1988	Appearance of false calling and clearing signals in circuits operated by switched teleprinter services
R.83	 	11-1988	Changes of level and interruptions in VFT channels
R.90	 	11-1988	Organization for locating and clearing faults in international telegraph switched networks
R.91	 	11-1988	General maintenance aspects for the maritime satellite telex service

R.100-R.119: Time-division multiplexing



R.100	 	03-1993	Transmission characteristics of international TDM links
R.101	 	03-1993	Code and speed dependent TDM system for anisochronous telegraph and data transmission using bit interleaving
R.102	 	03-1993	4800 bit/s code and speed dependent and hybrid TDM systems for anisochronous telegraph and data transmission using bit interleaving
R.103	 	11-1988	Code and speed-dependent TDM 600 bit/s system for use in point-to-point or branch-line muldex configurations

R.105	 	03-1993	Duplex muldex concentrator, connecting a group of gentex and telex subscribers to a telegraph exchange by assigning virtual channels to time slots of a bit-interleaved TDM system
R.106	 	08-1995	Muldex unit for telegraph and low speed data transmission using TDM bit interleaving with an aggregate bit rate higher than 4800 bit/s
R.111	 	03-1993	Code and speed independent TDM system for anisochronous telegraph and data transmission
R.112	 	03-1993	TDM hybrid system for anisochronous telegraph and data transmission using bit interleaving
R.113	 	03-1993	Combined muldex for telegraphy and synchronous data transmission
R.114	 	03-1993	Numbering of international TDM channels
R.115	 	03-1993	Maintenance loops for TDM-systems
R.116	 	11-1988	Maintenance tests to be carried out on international TDM systems
R.117	 	03-1993	End-to-end error performance for telegraph, telex and gentex connections involving regenerative equipment
R.118	 	03-1993	Performance and availability monitoring in regenerative TDM



R.120-R.139: Transmission quality above 50 bauds

R.120	 	11-1988	Tolerable limits for the degree of isochronous distortion of code-independent telegraph circuits operating at modulation rates of 75, 100 and 200 bauds
R.121	 	11-1988	Standard limits of transmission quality for start-stop user classes of service 1 and 2 on anisochronous data networks
R.122	 	11-1988	Summary of transmission plans for rates up to 300 bauds

R.140-R.149: Definitions

R.140	 	11-1988	Definitions of essential technical terms in the field of telegraph transmission
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R.150-R.159: Availability and reliability of international telegraph circuits



R.150	 	11-1988	Automatic protection switching of dual diversity bearers
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Series S: Telegraph services terminal equipment



S.1-S.139: Start-stop terminals

S.1	 	03-1993	International Telegraph Alphabet No. 2
S.2	 	11-1988	Coding scheme using International Telegraph Alphabet No. 2 (ITA2) to allow the transmission of capital and small letters
S.3	 	11-1988	Transmission characteristics of the local end with its termination (ITA2)
S.4	 	03-1993	Special use of certain characters of the International Telegraph Alphabet No. 2
S.5	 	11-1988	Standardization of page-printing start-stop equipment and cooperation between page-printing and tape-printing start-stop equipment (ITA2)
S.6	 	11-1988	Characteristics of answerback units (ITA2)
S.7	 	11-1988	Control of teleprinter motors
S.8	 	03-1993	Intercontinental standardization of the modulation rate of start-stop apparatus and of the use of combination No. 4 in figure-shift
S.9	 	11-1988	Switching equipment of start-stop apparatus
S.10	 	11-1988	Transmission at reduced character transfer rate over a standardized 50-baud telegraph channel
S.11	 	11-1988	Use of start-stop reperforating equipment for perforated tape retransmission
S.12	 	11-1988	Conditions that must be satisfied by synchronous systems operating in connection with standard 50-baud teleprinter circuits
S.13	 	11-1988	Use on radio circuits of 7-unit synchronous systems giving error correction by automatic repetition
S.14	 	11-1988	Suppression of unwanted reception in radiotelegraph multi-destination teleprinter systems
S.15	 	11-1988	Use of the telex network for data transmission at 50 bauds
S.16	 	03-1993	Connection to the telex network of an automatic terminal using a V.24 DCE/DTE interface
S.17	 	11-1988	Answer-back unit simulators
S.18	 	11-1988	Conversion between International Telegraph Alphabet No. 2 and International Alphabet No. 5
S.19	 	11-1988	Calling and answering in the telex network with automatic terminal equipment
S.20	 	03-1993	Automatic clearing procedure for a telex terminal
S.21	 	03-1993	Use of display screens in telex machines
S.22	 	03-1993	"Conversation impossible" and or pre-recorded message in response to J/BELL signals from a telex terminal
S.23	 	03-1993	Automatic request of the answerback of the terminal of the calling party, by the telex terminal of the called party or by the international network
S.30	 	11-1988	Standardization of basic model page-printing machine using International Alphabet No. 5
S.31	 	11-1988	Transmission characteristics for start-stop data terminal equipment using International Alphabet No. 5
S.32	 	11-1988	Answer-back units for 200- and 300-baud start-stop machines in accordance with Recommendation S.30
S.33	 	03-1993	Alphabets and presentation characteristics for the intex service
S.34	 	03-1993	Intex terminals – Requirements to effect interworking with the international telex service
S.35	 	03-1993	Answerback coding for the Intex service
S.36	 	07-1996	Intex and similar services – Terminal requirements to effect interworking between terminals operating at different speeds

S.140-S.199: Definitions

















S.140   11-1988 Definitions of essential technical terms relating to apparatus for alphabetic telegraphy




S-Series: Supplements to the Series S Recommendations














































































S.sup1   11-1988 Minimal specifications for the bilingual (arabic/latin) teleprinter













































Series T: Terminals for telematic services































































T.0	 	07-1996	Classification of facsimile terminals for document transmission over the public networks	
T.1	 	11-1988	Standardization of phototelegraph apparatus	
T.2		11-1988	Standardization of Group 1 facsimile apparatus for document transmission <i>Withdrawn in 07/1996 in recognition of the fact that Group 1 stand-alone terminals had not been manufactured for many years and that Group 3 facsimile terminals were the only type being used on the PSTN</i>	Withdrawn.
T.3		11-1988	Standardization of Group 2 facsimile apparatus for document transmission <i>Withdrawn together in 07/1996 in recognition of the fact that Group 2 stand-alone terminals had not been manufactured for many years and that Group 3 facsimile terminals were the only type being used on the PSTN</i>	Withdrawn.
T.4	 	07-2003	Standardization of Group 3 facsimile terminals for document transmission	
G.511	 	02-1998	Test methodology for Group 3 facsimile processing equipment in the Public Switched Telephone Network <i>This Recommendation was renumbered as ITU-T Rec. T.5 on 2002-02-15 without further modification</i>	
T.6	 	11-1988	Facsimile coding schemes and coding control functions for Group 4 facsimile apparatus	
T.10	 	11-1988	Document facsimile transmissions on leased telephone-type circuits	
T.10bis	 	11-1988	Document facsimile transmissions in the general switched telephone network	
H.41/T.11		11-1988	Phototelegraph transmissions on telephone-type circuit <i>This Recommendation was also included but not published in H series under alias number H.41. It was deleted after its content became technically out of date</i>	Withdrawn.
T.12		11-1988	Range of phototelegraph transmissions on a telephone-type circuit <i>This Recommendation was also included but not published in H series under alias number H.42. It was deleted after its content became technically out of date</i>	Withdrawn.
T.15		11-1988	Phototelegraph transmission over combined radio and metallic circuits <i>Corresponds to CCIR 344. Deleted after its content became technically out of date</i>	Withdrawn.
T.20		11-1988	Standardized test chart for facsimile transmissions <i>T.20 and T.21 are superseded by ITU-T T.22, and the test charts 1, 2 and 3 they described are replaced by test charts 4 and 5 of T.22</i>	Withdrawn.
T.21		11-1988	Standardized test charts for document facsimile transmissions <i>T.20 and T.21 are superseded by ITU-T T.22, and the test charts 1, 2 and 3 they described are replaced by test charts 4 and 5 of T.22</i>	Withdrawn.
T.22	 	03-1993	Standardized test charts for document facsimile transmissions <i>Figures reproducing test charts in T.22 Annex A are not suited for measurements. Original test charts are available from ITU sales department.</i>	
T.23	 	04-1994	Standardized colour test chart for document facsimile transmissions <i>Figure reproducing test charts in T.23 Annex A is not suited for measurements. Original test chart is available from ITU sales department.</i>	
T.24		06-1998	Standardized digitized image set <i>This Recommendation includes two CD-ROMs containing the digitized image set. Due to the quantity of data, this publication is only available as paper plus CD-ROM</i>	Available only in PDF.
T.24 (1998) Amend.1		02-2000		
T.30	 	07-2003	Procedures for document facsimile transmission in the general switched telephone network	
T.30 (2003) Erratum 1	 	04-2004	<i>Applies only to English version</i>	




















T.31			08-1995	Asynchronous facsimile DCE control – Service Class 1	
T.31 (1995) Amendment 1			07-1996	Annex B: Procedure for Service Class 1 support of V.34 modems	
T.32			08-1995	Asynchronous facsimile DCE control – Service Class 2 <i>Covering Note 30.10.1997: Corrigendum</i>	
T.32 (1995) Amendment 1			07-1996		
T.33			07-1996	Facsimile routing utilizing the subaddress	
T.35			02-2000	Procedure for the allocation of ITU-T defined codes for non-standard facilities	
T.36			07-1997	Security capabilities for use with Group 3 facsimile terminals	
T.36 (1997) Amendment 1			04-1999		
T.37			06-1998	Procedures for the transfer of facsimile data via store-and-forward on the Internet	
T.37 (1998) Amendment 1			09-1999	Full Mode	
T.37 (1998) Amendment 2			03-2001		
T.37 (1998) Amendment 3			11-2002		
T.38			03-2002	Procedures for real-time Group 3 facsimile communication over IP networks	
T.39			10-1997	Application profiles for simultaneous voice and facsimile terminals	
T.42			07-2003	Continuous-tone colour representation method for facsimile	
T.42 (2003) Corrigendum 1			03-2004		
T.43			07-1997	Colour and gray-scale image representations using lossless coding scheme for facsimile	
T.43 (1997) Amendment 1			02-2000	Accommodation of new and future Resolutions	
T.44			04-1999	Mixed Raster Content (MRC)	
T.44 (1999) Amendment 1			02-2000	Accommodation of new Annex B	
T.45			02-2000	Run-length Colour Encoding	
T.50			09-1992	International Reference Alphabet (IRA) (Formerly International Alphabet No. 5 or IA5) – Information technology – 7-bit coded character set for information interchange	
T.51			09-1992	Latin based coded character sets for telematic services	
T.51 (1992) Amendment 1			08-1995		
T.52			03-1993	Non-latin coded character sets for telematic services	
T.52 (1993) Amendment 1			10-1996		
T.53			04-1994	Character coded control functions for telematic services	
T.60			03-1993	Terminal equipment for use in the teletex service <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
T.61			03-1993	Character repertoire and coded character sets for the international teletex service <i>Never published. Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
T.62			03-1993	Control procedures for teletex and Group 4 facsimile services	
T.62bis			03-1993	Control procedures for teletex and G4 facsimile services based on Recommendations X.215 and X.225	
T.63			03-1993	Provisions for verification of teletex terminal compliance <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.

T.64			03-1993	Conformance testing procedures for the teletex Recommendations <i>Deleted as a consequence of the suppression of Teletex service</i>	Withdrawn.
T.65			11-1988	Applicability of telematic protocols and terminal characteristics to computerized communication terminals (CCTs) <i>This Recommendation was deleted in 07/1999 as it was no longer applicable due to changes in technology</i>	Withdrawn.
T.66			03-2002	Facsimile code points for use with Recommendations V.8 and V.8 bis	
T.70			03-1993	Network-independent basic transport service for the telematic services	
T.71			11-1988	Link access protocol balanced (LAPB) extended for half-duplex physical level facility	
T.80			09-1992	Common components for image compression and communication – Basic principles	
T.81			09-1992	Information technology – Digital compression and coding of continuous-tone still images – Requirements and guidelines	
T.81 (2002) Amendment 1			01-2004	Patent information update	Pre-published.
T.82			03-1993	Information technology – Coded representation of picture and audio information – Progressive bi-level image compression	
T.82 (1993) Technical Cor.1			03-1995		
T.82 (1993) Technical Cor.2			03-2001		
T.83			11-1994	Information technology – Digital compression and coding of continuous-tone still images: Compliance testing <i>This Recommendation includes 3 diskettes containing compliance test data for the generic encoder and decoder compliance tests.</i>	
T.84			07-1996	Information technology – Digital compression and coding of continuous-tone still images: Extensions	
T.84 (1996) Amendment 1			04-1999	Provisions to allow registration of new compression types and versions in the SPIFF header	
T.85			08-1995	Application profile for Recommendation T.82 – Progressive bi-level image compression (JBIG coding scheme) for facsimile apparatus	
T.85 (1995) Amendment 1			10-1996		
T.85 (1995) Corrigendum 1			02-1997		
T.85 (1995) Amendment 2			10-1997	<i>Covering note: 7 February 2000: French, Spanish only.</i>	
T.86			06-1998	Information technology – Digital compression and coding of continuous-tone still images: Registration of JPEG Profiles, SPIFF Profiles, SPIFF Tags, SPIFF colour Spaces, APPn Markers, SPIFF Compression types and Registration authorities (REGAUT) <i>Covering note, February 1999: Corrigendum</i>	
T.87			06-1998	Information technology – Lossless and near-lossless compression of continuous-tone still images – Baseline <i>This Recommendation includes one diskette containing the JPEG-LS Lossless and near-lossless image compression reference implementation and a conformance testing image set.</i>	
T.88			02-2000	Information technology – Lossy/lossless coding of bi-level images	
T.88 (2000) Amendment 1			06-2003	Encoder	Pre-published.
T.88 (2000) Amendment 2			06-2003	Extension of adaptive templates for halftone coding	
T.89			09-2001	Application profiles for Recommendation T.88 – Lossy/lossless coding of bi-level images (JBIG2) for facsimile	
T.90			02-1992	Characteristics and protocols for terminals for telematic services in ISDN	

T.90 (1992) Amendment 1	 	11-1994		
T.90 (1992) Amendment 2	 	07-1996		
T.90 (1992) Amendment 3	 	06-1998	Cause value for a G4 fax fallback	
T.100	 	11-1988	International information exchange for interactive Videotex	
T.101	 	11-1994	International interworking for Videotex services	
T.102	 	03-1993	Syntax-based Videotex end-to-end protocols for the circuit mode ISDN	
T.103	 	03-1993	Syntax-based Videotex end-to-end protocols for the packet mode ISDN	
T.104	 	03-1993	Packet mode access for syntax-based Videotex via PSTN	
T.105	 	11-1994	Syntax-based Videotex application layer protocol	
T.106	 	03-1993	Framework of videotex terminal protocols	
T.107	 	08-1995	Enhanced man machine interface for videotex and other retrieval services (VEMMI)	
T.120	 	07-1996	Data protocols for multimedia conferencing	
T.120 Annex C	 	02-1998	Lightweight profiles for the T.120 architecture	
T.121	 	07-1996	Generic application template	
T.122	 	02-1998	Multipoint communication service – Service definition	
T.123	 	05-1999	Network-specific data protocol stacks for multimedia conferencing	
T.124	 	02-1998	Generic Conference Control	
T.125	 	02-1998	Multipoint communication service protocol specification	
T.126	 	07-1997	Multipoint still image and annotation protocol	
T.127	 	08-1995	Multipoint binary file transfer protocol	
T.128	 	02-1998	Multipoint application sharing	
T.134	 	02-1998	Text chat application entity	
T.135	 	02-1998	User-to-reservation system transactions within T.120 conferences	
T.136	 	05-1999	Remote device control application protocol	
T.137	 	02-2000	Virtual meeting room management for multimedia conferencing audio-visual control	
T.140	 	02-1998	Protocol for multimedia application text conversation	
T.140 Addendum 1	 	02-2000		
T.150	 	11-1988	Telewriting terminal equipment	
T.170	 	02-1998	Framework of the T.170-Series of Recommendations	
T.171		10-1996	Protocols for interactive audiovisual services: Coded representation of multimedia and hypermedia objects	Available only in PDF.
T.172	 	02-1998	MHEG-5 – Support for base-level interactive applications	
T.173	 	07-1997	MHEG-3 script interchange representation	
T.174	 	10-1996	Application programming interface (API) for MHEG-1	
T.175	 	02-1998	Application programming interface (API) for MHEG-5	
T.176	 	02-1998	Application programming interface (API) for digital storage media command and control (DSM-CC)	
T.180	 	06-1998	Homogeneous access mechanism to communication services	
T.190	 	08-1995	Cooperative Document Handling (CDH) – Framework and basic services	
T.191	 	07-1996	Cooperative document handling (CDH) – Joint synchronous editing (point-to-point)	
T.192	 	06-1998	Cooperative document handling – Complex services: Joint synchronous editing and joint document presentation/viewing	



















T.200			10-1996	Programmable communication interface for terminal equipment connected to ISDN <i>This Recommendation had been approved at the WTSC 1996. In its Appendix, it describes one of the programmable communication interfaces which were available on the market at that time. Although such an interface does not affect the communication between networks but is rather a matter for implementation at a local computer (e.g. PC), the related study Question had been accepted at the WTSC-96 to promote computer communication via the ISDN, and thus the growth of the ISDNs. After 1996, the quick market devel</i>	Withdrawn.
T.300	 		11-1988	General principles of telematic interworking	
T.330	 		11-1988	Telematic access to interpersonal messaging system	
T.351	 		11-1988	Imaging process of character information on facsimile apparatus	
T.390	 		11-1988	Teletex requirements for interworking with the telex service	
T.400			11-1988	Introduction to document architecture, transfer and manipulation <i>Deleted after its content became technically out of date</i>	Withdrawn.
T.411	 		03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Introduction and general principles	
T.411 (1993) Technical Cor. 1	 		10-1997		
T.412	 		03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Document structures	
T.412 (1993) Technical Cor. 1	 		10-1997		
T.412 (1993) Technical Cor. 2	 		10-1997		
T.413	 		11-1994	Information technology – Open Document Architecture (ODA) and interchange format: Abstract interface for the manipulation of ODA documents	
T.414	 		03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Document profile	
T.414 (1993) Technical Cor. 1	 		10-1997		
T.414 (1993) Technical Cor. 2	 		10-1997		
T.415	 		03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Open document interchange format (ODIF)	
T.415 (1993) Technical Cor. 1	 		10-1997		
T.415 (1993) Technical Cor. 2	 		10-1997		
T.416	 		03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Character content architectures	
T.416 (1993) Technical Cor. 1	 		10-1997		
T.417	 		03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Raster graphics content architectures	
T.417 (1993) Technical Cor. 1	 		10-1997		
T.417 (1993) Amendment 1	 		10-1997		
T.417 (1993)	 		02-2000		

Amendment 2				
T.418	 	03-1993	Information technology – Open Document Architecture (ODA) and interchange format: Geometric graphics content architecture	
T.419	 	08-1995	Information technology – Open Document Architecture (ODA) and interchange format: Audio content architectures	
T.421	 	11-1994	Information technology – Open Document Architecture (ODA) and interchange format: Tabular structures and tabular layout	
T.422	 	08-1995	Information technology – Open Document Architecture (ODA) and interchange format: Identification of document fragments	
T.424	 	07-1996	Information technology – Open Document Architecture (ODA) and interchange format: Temporal relationships and non-linear structures	
T.431	 	09-1992	Document Transfer And Manipulation (DTAM) – Services and protocols – Introduction and general principles	
T.432	 	09-1992	Document Transfer And Manipulation (DTAM) – Services and protocols – Service definition	
T.432 (1992) Amendment 1	 	08-1995	Revisions of T.432 to support G4 colour and file transfer	
T.433	 	09-1992	Document Transfer And Manipulation (DTAM) – Services and protocols – Protocol specification	
T.433 (1992) Amendment 1	 	08-1995	Revisions of T.433 to support G4 colour and file transfer	
T.434	 	04-1999	Binary file transfer format for the telematic services	
T.435	 	08-1995	Document Transfer And Manipulation (DTAM) – Services and protocols – Abstract service definition and procedures for confirmed document manipulation	
T.436	 	08-1995	Document Transfer and Manipulation (DTAM) – Services and protocols – Protocol specifications for confirmed document manipulation	
T.441	 	11-1988	Document Transfer And Manipulation (DTAM) – Operational structure	
T.501	 	03-1993	Document application profile MM for the interchange of formatted mixed mode documents	
T.502	 	11-1994	Document application profile PM-11 for the interchange of simple structure, character content documents in processable and formatted forms	
T.503	 	02-2000	Document application profile for the interchange of Group 4 facsimile documents	
T.504	 	03-1993	Document application profile for videotex interworking	
T.505	 	11-1994	Document application profile PM-26 for the interchange of enhanced structure, mixed content documents in processable and formatted forms	
T.506	 	08-1993	Document application profile PM-36 for the interchange of extended document structures and mixed content documents in processable and formatted forms	
T.510	 	03-1993	General overview of the T.510-Series Recommendations	
T.521	 	11-1994	Communication application profile BT0 for document bulk transfer based on the session service	
T.521 (1994) Amendment 1	 	08-1995		
T.522	 	09-1992	Communication application profile BT1 for document bulk transfer	
T.523	 	03-1993	Communication application profile DM-1 for videotex interworking	
T.541	 	03-1993	Operational application profile for videotex interworking	
T.561	 	11-1988	Terminal characteristics for mixed mode of operation MM	
T.562	 	11-1988	Terminal characteristics for teletex processable mode PM.1	
T.563	 	10-1996	Terminal characteristics for Group 4 facsimile apparatus	
T.563 (1996) Amendment 1	 	07-1997		
T.563 (1996) Amendment 2	 	10-1997	Annex C – T.30 frames for G4 facsimile	







T.563 (1996) Corrigendum 1	 	06-1998		
T.563 (1996) Amendment 3	 	04-1999		
T.564	 	03-1993	Gateway characteristics for videotex interworking	
T.571	 	09-1992	Terminal characteristics for the telematic file transfer within the teletex service	
T.611	 	11-1994	Programming Communication Interface (PCI) APPLI/COM for facsimile Group 3, facsimile Group 4, teletex, telex, E-mail and file transfer services	
T.800	 	08-2002	Information technology – JPEG 2000 image coding system: Core coding system	
T.801	 	08-2002	Information technology – JPEG 2000 image coding system: Extensions	
T.803		11-2002	Information technology – JPEG 2000 image coding system: Conformance testing	Pre-published. Available only in PDF.
T.804	 	08-2002	Information technology – JPEG 2000 image coding system: Reference software	
T.870	 	03-2002	Information technology – Lossless and near-lossless compression of continuous-tone still images: Extensions <i>This Recommendation includes an electronic attachment containing the data set used for implementing the JPEG-LS T.870 extension conformance test</i>	

Series U: Telegraph switching













U.1-U.10: General

U.1	 	03-1993	Signalling conditions to be applied in the international telex service
U.2	 	11-1988	Standardization of dials and dial pulse generators for the international telex service
U.3	 	11-1988	Arrangements in switching equipment to minimize the effects of false calling signals
U.4	 	11-1988	Exchange of information regarding signals destined to be used over international circuits concerned with switched teleprinter networks
U.5	 	11-1988	Requirements to be met by regenerative repeaters in international connections
U.6	 	11-1988	Prevention of fraudulent transit traffic in the fully automatic international telex service
U.7	 	03-1993	Numbering schemes for automatic switching networks
U.8	 	11-1988	Hypothetical reference connections for telex and gentex networks
U.10	 	03-1993	Equipment of an international telex position





U.11-U.19: Specific signalling schemes and interworking between signalling systems

U.11	 	03-1993	Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling)
U.12	 	03-1993	Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling)
U.15	 	03-1993	Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12













U.20-U.29: Signalling over radio and multiplexed channels

U.20	 	11-1988	Telex and gentex signalling on radio channels (synchronous 7-unit systems affording error correction by automatic repetition)
U.21	 	11-1988	Operator recall on a telex call set up on a radiotelegraph circuit
U.22	 	11-1988	Signals indicating delay in transmission on calls set up by means of synchronous systems with automatic error correction by repetition
U.23	 	11-1988	Use of radiotelegraph circuits with ARQ equipment for fully automatic telex calls charged on the basis of elapsed time
U.24	 	11-1988	Requirements for telex and gentex operation to be met by synchronous multiplex equipment described in Recommendation R.44
U.25	 	11-1988	Requirements for telex and gentex operation to be met by code- and speed-dependent TDM systems conforming to Recommendation R.101









U.30-U.39: Gentex signalling

U.30	 	11-1988	Signalling conditions for use in the international gentex network
U.31	 	11-1988	Prevention of connection to faulty stations and/or station lines in the gentex service







U.40-U.59: Particular signalling facilities

U.40	 	03-1993	Reactions by automatic terminals connected to the telex network in the event of ineffective call attempts or signalling incidents
U.41	 	11-1988	Changed address interception and call redirection in the telex service
U.43	 	11-1988	Follow-on calls
U.44	 	11-1988	Multi-address calls in real time for broadcast purposes in the international telex service
U.45	 	03-1993	Response to the not-ready condition of the telex terminal
U.46	 	03-1993	Interruption of automatic transmission and flow control in the international telex service





U.60-U.69: Radiotelex interworking

U.60	 	11-1988	General requirements to be met in interfacing the international telex network with maritime satellite systems	
U.61	 	03-1993	Detailed requirements to be met in interfacing the international telex network with maritime satellite systems	
U.62	 	03-1993	General requirements to be met in interfacing the international telex network with the fully automated maritime VHF/UHF radio system	
U.63	 	11-1988	General requirements to be met in interfacing the international telex network with the maritime "direct printing" system	





U.70-U.79: Interworking between new information services and telex

U.70	 	11-1988	Telex service signals for telex to teletex interworking	
U.74	 	11-1988	Extraction of telex selection information from a calling telex answerback	
U.75	 	03-1993	Automatic called telex answerback check	



U.80-U.99: Telex store and forward

U.80	 	03-1993	International telex store and forward access from a telex subscriber	
U.81	 	10-1996	International telex store-and-forward – Delivery to a telex subscriber	
U.82		11-1988	International telex store and forward – Interconnection of telex store and forward units	Withdrawn.



















U.100-U.139: Intex service

U.101	 	03-1993	Signalling systems for the Intex service (types E and F signalling)	
U.102	 	07-1996	Intex and similar services – Network requirements to effect interworking between terminals operating at different speeds	

U.140-U.199: Definitions

U.140	 	11-1988	Definitions of essential technical terms relating to telegraph switching and signalling	
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U.200-U.299: The international telex service

U.200	 	03-1993	The international telex service – General technical requirements for interworking	
U.201	 	03-1993	Interworking between the teletex service and the international telex service	
U.202	 	03-1993	Technical requirements to be met in providing the international telex service within an integrated services digital network <i>This Recommendation is also included but not published in I series under alias number I.560</i>	
U.203	 	03-1993	Technical requirements to be met when providing real-time bothway communications between terminals of the international telex service and data terminal equipments on a PSPDN or via the PSTN	
U.204	 	03-1993	Interworking between the international telex service and the public interpersonal messaging service	
U.205	 	03-1993	Store-and-retrieve facility for the delivery of messages from a terminal of the international telex service to a data terminal equipment which connects to a packet-switched public data network over the public switched telephone network	
U.206	 	03-1993	Technical requirements for interworking between the international telex service and the videotex service	
U.207	 	03-1993	Technical requirements to be met for the transfer of messages between terminals of the international telex service and Group 3 facsimile terminals connected to the PSTN	
U.208	 	10-1996	The international telex service – Interworking with the INMARSAT C	

system using one-stage selection

U.210



03-1993

Intex service network requirements to effect interworking with the international telex service

U.220















03-1993





























The international telex service – Technical requirements for a status enquiry function in an interworking scenario

Series V: Data communication over the telephone network

V.1-V.9: General





V.1	 	11-1988	Equivalence between binary notation symbols and the significant conditions of a two-condition code	
V.2	 	11-1988	Power levels for data transmission over telephone lines	
V.4	 	11-1988	General structure of signals of International Alphabet No. 5 code for character oriented data transmission over public telephone networks	
V.5		11-1988	Standardization of data signalling rates for synchronous data transmission in the general switched telephone network <i>Deleted after its content became technically out of date</i>	Withdrawn.
V.6		11-1988	Standardization of data signalling rates for synchronous data transmission on leased telephone-type circuits <i>Deleted after its content became technically out of date</i>	Withdrawn.
V.7	 	11-1988	Definitions of terms concerning data communication over the telephone network	
V.8	 	11-2000	Procedures for starting sessions of data transmission over the public switched telephone network	
V.8bis	 	11-2000	Procedures for the identification and selection of common modes of operation between data circuit-terminating equipments (DCEs) and between data terminal equipments (DTEs) over the public switched telephone network and on leased point-to-point telephone-type circuits	



V.10-V.34: Interfaces and voiceband modems

V.10	 	03-1993	Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates nominally up to 100 kbit/s <i>This Recommendation is also included but not published in X series under alias number X.26.</i>	
V.11	 	10-1996	Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s <i>This Recommendation is also included but not published in X series under alias number X.27</i>	
V.12	 	08-1995	Electrical characteristics for balanced double-current interchange circuits for interfaces with data signalling rates up to 52 Mbit/s	
V.13	 	03-1993	Simulated carrier control	
V.14	 	03-1993	Transmission of start-stop characters over synchronous bearer channels	
V.14 (1993) Corrigendum 1	 	09-1998		
V.15	 	11-1988	Use of acoustic coupling for data transmission	
V.16	 	11-1988	Medical analogue data transmission modems	
V.17	 	02-1991	A 2-wire modem for facsimile applications with rates up to 14 400 bit/s	
V.17 (1991) Corrigendum 1	 	09-1998		
V.18	 	11-2000	Operational and interworking requirements for DCEs operating in the text telephone mode	
V.18 (2000) Amendment 1	 	11-2002		
V.19	 	11-1988	Modems for parallel data transmission using telephone signalling frequencies	
V.20		11-1988	Parallel data transmission modems standardized for universal use in the general switched telephone network <i>Deleted after its content became technically out of date</i>	Withdrawn.
V.21	 	11-1988	300 bits per second duplex modem standardized for use in the general switched telephone network	















V.22	 	11-1988	1200 bits per second duplex modem standardized for use in the general switched telephone network and on point-to-point 2-wire leased telephone-type circuits	
V.22bis	 	11-1988	2400 bits per second duplex modem using the frequency division technique standardized for use on the general switched telephone network and on point-to-point 2-wire leased telephone-type circuits	
V.23	 	11-1988	600/1200-baud modem standardized for use in the general switched telephone network	
V.24	 	02-2000	List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)	
V.25	 	10-1996	Automatic answering equipment and general procedures for automatic calling equipment on the general switched telephone network including procedures for disabling of echo control devices for both manually and automatically established calls	
V.25 (1996) Corrigendum 1	 	07-2001		
V.25bis	 	10-1996	Synchronous and asynchronous automatic dialling procedures on switched networks	
V.26	 	11-1988	2400 bits per second modem standardized for use on 4-wire leased telephone-type circuits	
V.26bis	 	11-1988	2400/1200 bits per second modem standardized for use in the general switched telephone network	
V.26ter	 	11-1988	2400 bits per second duplex modem using the echo cancellation technique standardized for use on the general switched telephone network and on point-to-point 2-wire leased telephone-type circuits	
V.27	 	11-1988	4800 bits per second modem with manual equalizer standardized for use on leased telephone-type circuits	
V.27bis	 	11-1988	4800/2400 bits per second modem with automatic equalizer standardized for use on leased telephone-type circuits	
V.27ter	 	11-1988	4800/2400 bits per second modem standardized for use in the general switched telephone network	
V.28	 	03-1993	Electrical characteristics for unbalanced double-current interchange circuits	
V.29	 	11-1988	9600 bits per second modem standardized for use on point-to-point 4-wire leased telephone-type circuits	
V.31	 	11-1988	Electrical characteristics for single-current interchange circuits controlled by contact closure	
V.31bis	 	11-1988	Electrical characteristics for single-current interchange circuits using optocouplers	
V.32	 	03-1993	A family of 2-wire, duplex modems operating at data signalling rates of up to 9600 bit/s for use on the general switched telephone network and on leased telephone-type circuits	
V.32bis	 	02-1991	A duplex modem operating at data signalling rates of up to 14 400 bit/s for use on the general switched telephone network and on leased point-to-point 2-wire telephone-type circuits	
V.33	 	11-1988	14 400 bits per second modem standardized for use on point-to-point 4-wire leased telephone-type circuits	
V.34	 	02-1998	A modem operating at data signalling rates of up to 33 600 bit/s for use on the general switched telephone network and on leased point-to-point 2-wire telephone-type circuits	

V.35-V.39: Wideband modems

























V.35		10-1984	<i>Data transmission at 48 kbit/s using 60-108 kHz group band circuits Deleted because the information contained in V.35 was out of date. Alternative techniques are described in ITU-T V.36 and V.37</i>	Withdrawn.
V.36	 	11-1988	Modems for synchronous data transmission using 60-108 kHz group band circuits	
V.37	 	11-1988	Synchronous data transmission at a data signalling rate higher than 72 kbit/s using 60-108 kHz group band circuits	

V.38	 	10-1996	A 48/56/64 kbit/s data circuit-terminating equipment standardized for use on digital point-to-point leased circuits	
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V.40-V.49: Error control

























V.40		11-1988	Error indication with electromechanical equipment <i>Deleted after its content became technically out of date</i>	Withdrawn.
V.41	 	11-1988	Code-independent error-control system	
V.42	 	03-2002	Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion	
V.42 (2002) Corrigendum 1	 	07-2003		
V.42bis	 	01-1990	Data compression procedures for data circuit-terminating equipment (DCE) using error correction procedures	
V.43	 	02-1998	Data flow control	
V.44	 	11-2000	Data compression procedures	
V.44 (2000) Corrigendum 1	 	03-2002		

V.50-V.59: Transmission quality and maintenance





















V.50	 	11-1988	Standard limits for transmission quality of data transmission	
M.729	 	11-1988	Organization of the maintenance of international public switched telephone circuits used for data transmission <i>This Recommendation is also included but not published in V series under alias number V.51</i>	
V.53	 	11-1988	Limits for the maintenance of telephone-type circuits used for data transmission	
V.54	 	11-1988	Loop test devices for modems	
O.71	 	11-1988	Impulsive noise measuring equipment for telephone-type circuits <i>This Recommendation is also included but not published in V series under alias number V.55</i>	
V.56	 	11-1988	Comparative tests of modems for use over telephone-type circuits	
V.56bis	 	08-1995	Network transmission model for evaluating modem performance over 2-wire voice grade connections	
V.56ter	 	08-1996	Test procedure for evaluation of 2-wire 4 kHz voiceband duplex modems <i>This Recommendation includes 2 diskettes containing the data files used for the voiceband duplex modems throughput tests.</i>	
V.58	 	09-1994	Management information model for V-Series DCEs	
V.59	 	11-2000	Managed objects for diagnostic information of public switched telephone network connected V-series modem DCEs	
V.59 (2000) Corrigendum 1	 	07-2001		
V.59 (2000) Corrigendum 2	 	03-2002		

V.60-V.99: Simultaneous transmission of data and other signals



V.61	 	08-1996	A simultaneous voice plus data modem, operating at a voice plus data signalling rate of 4800 bit/s, with optional automatic switching to data-only signalling rates of up to 14400 bit/s, for use on the General Switched Telephone Network and on leased point-to-point 2-wire telephone type circuits	
V.70	 	08-1996	Procedures for the simultaneous transmission of data and digitally encoded voice signals over the GSTN, or over 2-wire leased point-to-point telephone type circuits	

V.75	 	08-1996	DSVD terminal control procedures	
V.75 Appendix II	 	02-1998	Session establishment using V.75/H.245 procedures	
V.76	 	08-1996	Generic multiplexer using V.42 LAPM-based procedures	
V.80	 	08-1996	In-band DCE control and synchronous data modes for asynchronous DTE	
V.80 (1996) Amendment 1	 	07-2001		
V.90	 	09-1998	A digital modem and analogue modem pair for use on the Public Switched Telephone Network (PSTN) at data signalling rates of up to 56 000 bit/s downstream and up to 33 600 bit/s upstream	
V.91	 	05-1999	A digital modem operating at data signalling rates of up to 64 000 bit/s for use on a 4-wire circuit switched connection and on leased point-to-point 4-wire digital circuits	
V.91 (1999) Corrigendum 1	 	07-2001		
V.92	 	11-2000	Enhancements to Recommendation V.90	
V.92 (2000) Amendment 1	 	07-2001		
V.92 (2000) Amendment 2	 	03-2002		
V.92 (2000) Corrigendum 1	 	07-2003		













V.100-V.199: Interworking with other networks

V.100	 	11-1988	Interconnection between public data networks (PDNs) and the public switched telephone networks (PSTN)	
V.110	 	02-2000	Support by an ISDN of data terminal equipments with V-series type interfaces <i>This Recommendation is also included but not published in I Series under alias number I.463.</i>	
V.120	 	10-1996	Support by an ISDN of data terminal equipment with V-series type interfaces with provision for statistical multiplexing <i>This Recommendation is also included but not published in I series under alias number I.465</i>	
V.120 (1996) Corrigendum 1	 	05-1999		
V.130	 	08-1995	ISDN terminal adaptor framework	
V.140	 	02-1998	Procedures for establishing communication between two multiprotocol audiovisual terminals using digital channels at a multiple of 64 or 56 kbit/s	
V.150.0	 	01-2003	Modem-over-IP networks: Foundation	
V.150.1	 	01-2003	Modem-over-IP networks: Procedures for the end-to-end connection of V-series DCEs	
V.150.1 (2003) Corrigendum 1	 	07-2003		Pre-published.
V.150.1 (2003) Corrigendum 2	 	03-2004		Pre-published.



V.200-V.249: Interface layer specifications for data communication

V.230	 	11-1988	General data communications interface layer 1 specification	
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V.250-V.299: Control procedures

V.250	 	07-2003	Serial asynchronous automatic dialling and control	
V.250 Supplement 1	 	06-2001	Various extensions to V.250 basic command set	
V.251	 	08-1996	Procedure for DTE-controlled call negotiation <i>Approved and published as ITU-T V.25 ter/Annex A (08/96), included without further modification in V.25 ter (07/97), renumbered V.251 on 6 February 1998 and republished without further modifications</i>	
V.251 (1996) Erratum 1	 	10-2003		
V.252	 	02-1998	Procedure for control of V.70 and H.324 terminals by a DTE	
V.253	 	02-1998	Control of voice-related functions in a DCE by an asynchronous DTE	



















V.300-V.399: Modems on digital circuits

V.300	 	07-1999	A 128 (144) kbit/s data circuit-terminating equipment standardized for use on digital point-to-point leased circuits	
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







Series X: Data networks and open system communications


X.1-X.199: Public data networks

X.1-X.19: Services and facilities









X.1	 	03-2000	International user classes of service in, and categories of access to, public data networks and Integrated Services Digital Networks (ISDNs)	
X.2	 	03-2000	International data transmission services and optional user facilities in public data networks and ISDNs	
X.3	 	03-2000	Packet Assembly/Disassembly facility (PAD) in a public data network	
X.4	 	11-1988	General structure of signals of International Alphabet No. 5 code for character oriented data transmission over public data networks	
X.5	 	10-1996	Facsimile Packet Assembly/Disassembly facility (FPAD) in a public data network	
X.6	 	08-1997	Multicast service definition	
X.6 (1997) Amendment 1	 	03-2000	Frame relay PVC multicast service definition	
X.7	 	04-2004	Technical characteristics of data transmission services	Pre-published.
X.8	 	07-1994	Multi-aspect PAD (MAP) framework and service definition	
X.10		03-1993	Categories of access for Data Terminal Equipment (DTE) to public data transmission services <i>Deleted as its content is fully covered by ITU-T X.1</i>	Withdrawn.












































X.20-X.49: Interfaces














X.20	 	11-1988	Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for start-stop transmission services on public data networks	
X.20bis	 	11-1988	Use on public data networks of Data Terminal Equipment (DTE) which is designed for interfacing to asynchronous duplex V-Series modems	
X.21	 	09-1992	Interface between Data Terminal Equipment and Data Circuit-terminating Equipment for synchronous operation on public data networks	
X.21bis	 	11-1988	Use on public data networks of Data Terminal Equipment (DTE) which is designed for interfacing to synchronous V-Series modems	
X.22	 	11-1988	Multiplex DTE/DCE interface for user classes 3-6	
X.24	 	11-1988	List of definitions for interchange circuits between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) on public data networks	
X.25	 	10-1996	Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks by dedicated circuit	
X.25 (1996) Corrigendum 1	 	09-1998		
V.10	 	03-1993	Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates nominally up to 100 kbit/s <i>This Recommendation is also included but not published in X series under alias number X.26.</i>	
V.11	 	10-1996	Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s <i>This Recommendation is also included but not published in X series under alias number X.27</i>	
X.28	 	12-1997	DTE/DCE interface for a start-stop mode Data Terminal Equipment accessing the Packet Assembly/Disassembly facility (PAD) in a public data network situated in the same country	
X.28 (1997) Amendment 1	 	03-2000	Extensions of PAD parameter settings and PAD service signals	



X.29	 	12-1997	Procedures for the exchange of control information and user data between a Packet Assembly/Disassembly (PAD) facility and a packet mode DTE or another PAD	
X.30	 	03-1993	Support of X.21, X.21 bis and X.20 bis based Data Terminal Equipments (DTEs) by an Integrated Services Digital Network (ISDN) <i>This Recommendation is also included but not published in I series under alias number I.461</i>	
X.31	 	11-1995	Support of packet mode terminal equipment by an ISDN <i>This Recommendation is also included but not published in I series under alias number I.462</i>	
X.32	 	10-1996	Interface between Data terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and accessing a Packet-Switched Public Data Network through a public switched telephone network or an Integrated Services Digital Network or a Circuit-Switched Public Data Network	
X.33	 	10-1996	Access to packet-switched data transmission services via frame relaying data transmission services	
X.34	 	10-1996	Access to packet-switched data transmission services via B-ISDN	
X.34 (1996) Corrigendum 1	 	03-2000		
X.35	 	11-1993	Interface between a PSPDN and a private PSDN which is based on X.25 procedures and enhancements to define a gateway function that is provided in the PSPDN	
X.36	 	02-2003	Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for public data networks providing frame relay data transmission service by dedicated circuit	
X.37	 	04-1995	Encapsulation in X.25 packets of various protocols including frame relay	
X.38	 	10-1996	G3 facsimile equipment/DCE interface for G3 facsimile equipment accessing the Facsimile Packet Assembly/Disassembly facility (FPAD) in a public data network situated in the same country	
X.39	 	10-1996	Procedures for the exchange of control information and user data between a Facsimile Packet Assembly/Disassembly (FPAD) facility and a packet mode Data Terminal Equipment (DTE) or another FPAD	
X.40		11-1988	Standardization of frequency-shift modulated transmission systems for the provision of telegraph and data channels by frequency division of a group	Withdrawn.
X.42	 	10-2003	Procedures and methods for accessing a public data network from a DTE operating under control of a generalized polling protocol	
X.45	 	10-1996	Interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for terminals operating in the packet mode and connected to public data networks, designed for efficiency at higher speeds	
X.46	 	09-1998	Access to FRDTS via B-ISDN	
X.48	 	10-1996	Procedures for the provision of a basic multicast service for data terminal equipments (DTEs) using Recommendation X.25	
X.49	 	10-1996	Procedures for the provision of an extended multicast service for data terminal equipments (DTEs) using Recommendation X.25	

X.50-X.89: Transmission, signalling and switching



















X.50	 	11-1988	Fundamental parameters of a multiplexing scheme for the international interface between synchronous data networks	
X.50bis	 	11-1988	Fundamental parameters of a 48-kbit/s user data signalling rate transmission scheme for the international interface between synchronous data networks	
X.51	 	11-1988	Fundamental parameters of a multiplexing scheme for the international interface between synchronous data networks using 10-bit envelope structure	
X.51bis	 	11-1988	Fundamental parameters of a 48-kbit/s user data signalling rate transmission scheme for the international interface between synchronous data networks using 10-bit envelope structure	

X.52	 	11-1988	Method of encoding anisochronous signals into a synchronous user bearer	
X.53	 	03-1993	Numbering of channels on international multiplex links at 64 kbit/s	
X.54	 	11-1988	Allocation of channels on international multiplex links at 64 kbit/s	
X.55	 	11-1988	Interface between synchronous data networks using a 6 + 2 envelope structure and single channel per carrier (SCPC) satellite channels	
X.56	 	11-1988	Interface between synchronous data networks using an 8 + 2 envelope structure and single channel per carrier (SCPC) satellite channels	
X.57	 	11-1988	Method of transmitting a single lower speed data channel on a 64 kbit/s data stream	
X.58	 	11-1988	Fundamental parameters of a multiplexing scheme for the international interface between synchronous non-switched data networks using no envelope structure	
X.60	 	11-1988	Common channel signalling for circuit-switched data applications	
Q.741/X.61		11-1988	Signalling System No. 7 – Data user part <i>This Recommendation was also included but not published in Q series under alias number Q.741. It was discontinued because it was no longer used</i>	Withdrawn.
X.70	 	11-1988	Terminal and transit control signalling system for start-stop services on international circuits between anisochronous data networks	
X.71	 	11-1988	Decentralized terminal and transit control signalling system on international circuits between synchronous data networks	
X.75	 	10-1996	Packet-switched signalling system between public networks providing data transmission services	
X.75 (1996) Corrigendum 1	 	09-1998		
X.76	 	02-2003	Network-to-network interface between public networks providing PVC and/or SVC frame relay data transmission service	
X.77	 	08-1997	Interworking between PSPDNs via B-ISDN	
X.77 (1997) Corrigendum 1	 	03-2000		
X.78	 	06-1999	Interworking procedures between networks providing frame relay data transmission services via B-ISDN	
X.78 (1999) Corrigendum 1	 	03-2000		
X.80	 	11-1988	Interworking of interexchange signalling systems for circuit-switched data services	
X.81	 	11-1988	Interworking between an ISDN circuit-switched and a circuit-switched public data network (CSPDN)	
X.82	 	11-1988	Detailed arrangements for interworking between CSPDNs and PSPDNs based on Recommendation T.70	
X.84	 	03-2004	Support of frame relay services over MPLS core networks	Pre-published.
X.85/Y.1321	 	03-2001	IP over SDH using LAPS	
X.85/Y.1321 (2001) Amendment 1	 	04-2004	Bit-oriented method for LAPS	Pre-published.
X.86/Y.1323	 	02-2001	Ethernet over LAPS	
X.86/Y.1323 (2001) Amendment 1	 	04-2002	Using Ethernet flow control as rate limiting	
X.87/Y.1324	 	10-2003	Multiple services ring based on RPR	Pre-published.
X.90-X.149: Network aspects				
X.92	 	11-1988	Hypothetical reference connections for public synchronous data networks	





X.96	 	03-2000	Call progress signals in public data networks	
X.110	 	04-2002	International routing principles and routing plan for Public Data Networks	
X.111	 	02-2003	Principles for the routing of international frame relay traffic	
X.115	 	04-1995	Definition of address translation capability in public data networks	
X.115 (1995) Amendment 1	 	10-1996	Refinements	
X.116	 	10-1996	Address translation registration and resolution protocol	
X.121	 	10-2000	International numbering plan for public data networks	
E.166/X.122	 	03-1998	Numbering plan interworking for the E.164 and X.121 numbering plans <i>This Recommendation is published with the double number E.166 and X.122</i>	
X.123	 	10-1996	Mapping between escape codes and TOA/NPI for E.164/X.121 numbering plan interworking during the transition period	
X.124	 	06-1999	Arrangements for the interworking of the E.164 and X.121 numbering plans for frame relay and ATM networks	
X.125	 	09-1998	Procedure for the notification of the assignment of international network identification codes for public frame relay data networks and ATM networks numbered under the E.164 numbering plan	
X.130	 	11-1988	Call processing delays in public data networks when providing international synchronous circuit-switched data services	
X.131	 	11-1988	Call blocking in public data networks when providing international synchronous circuit-switched data services	
X.134	 	08-1997	Portion boundaries and packet-layer reference events: basis for defining packet-switched performance parameters	
X.135	 	08-1997	Speed of service (delay and throughput) performance values for public data networks when providing international packet-switched services	
X.135 Suppl. 1		08-1997	Some test results from specific national and international portions <i>Published with ITU-T X.135 (1997)</i>	
X.136	 	08-1997	Accuracy and dependability performance values for public data networks when providing international packet-switched services	
X.137	 	08-1997	Availability performance values for public data networks when providing international packet-switched services	
X.138	 	08-1997	Measurement of performance values for public data networks when providing international packet-switched services	
X.139	 	08-1997	Echo, drop, generator and test DTEs for measurement of performance values in public data networks when providing international packet-switched services	
X.140	 	09-1992	General quality of service parameters for communication via public data networks	
X.141	 	11-1988	General principles for the detection and correction of errors in public data networks <i>A Corrigendum was indicated in 06/1990 for the English version.</i>	
X.142	 	10-2003	Quality of service metrics for characterizing Frame Relay/ATM service interworking performance	
X.144	 	10-2003	User information transfer performance parameters for public frame relay data networks	
X.145	 	10-2003	Connection establishment and dis-engagement performance parameters for public Frame Relay data networks providing SVC services	
X.146	 	10-2000	Performance objectives and quality of service classes applicable to frame relay	
X.147	 	10-2003	Frame Relay network availability	
X.147 (2003) Amendment 1	 	04-2004	Specification of availability objective values	Pre-published.
X.148	 	02-2003	Procedures for the measurement of the performance of public data networks providing the international frame relay service	

X.149	 	10-2003	Performance of IP networks when supported by public Frame Relay data networks	
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X.150-X.179: Maintenance





X.150	 	11-1988	Principles of maintenance testing for public data networks using Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) test loops	
X.151	 	10-2003	Frame Relay operations and maintenance – Principles and functions	
X.151 (2003) Erratum 1	 	03-2004		
X.160	 	10-1996	Architecture for customer network management service for public data networks	
X.161	 	08-1997	Definition of customer network management services for public data networks	
X.162	 	03-2000	Definition of management information for customer network management service for public data networks to be used with the CNMc interface	
X.163	 	04-1995	Definition of management information for customer network management service for public data networks to be used with the CNME interface	
X.170	 	06-1999	Network-network management architecture for data networks	
X.171	 	03-2000	Network-network management services for data networks	

X.180-X.199: Administrative arrangements











X.180	 	11-1988	Administrative arrangements for international closed user groups (CUGs)	
X.181	 	11-1988	Administrative arrangements for the provision of international permanent virtual circuits (PVCs)	



























X.200-X.299: Open Systems Interconnection

X.200-X.209: Model and notation





























X.200	 	07-1994	Information technology – Open Systems Interconnection – Basic Reference Model: The basic model	
X.207	 	11-1993	Information technology – Open Systems Interconnection – Application layer structure	
X.208		11-1988	<i>Specification of Abstract Syntax Notation One (ASN.1) CCITT Recommendation X.208 has been withdrawn on 30 October 2002 as it has been superseded by ITU-T Recommendations X.680-683. All known defects in X.208 have been corrected in ITU-T Recommendations X.680-683 (1993) further revised in 1997 and 2002. If you are a protocol designer creating new ASN.1 notation, you should use the 2002 version of ASN.1 as defined in ITU-T Recommendations X.680-X.683 (2002) instead of using CCITT Recommendation X.208. For further information, please see "Changing from ASN.1:19"</i>	Withdrawn.















X.210-X.219: Service definitions

X.210	 	11-1993	Information technology – Open Systems Interconnection – Basic Reference Model: Conventions for the definition of OSI services	
X.211	 	11-1995	Information technology – Open Systems Interconnection – Physical service definition	
X.212	 	11-1995	Information technology – Open Systems Interconnection – Data Link service definition	
X.213	 	10-2001	Information technology – Open Systems Interconnection – Network service definition	
X.214	 	11-1995	Information technology – Open Systems Interconnection – Transport service definition	






















X.215	 	11-1995	Information technology – Open Systems Interconnection – Session service definition	
X.215 (1995) Amendment 1	 	08-1997	Efficiency enhancements	
X.215 (1995) Amendment 2	 	12-1997	Nested connections functional unit	
X.215 (1995) Technical Cor. 1	 	03-2000		
X.216	 	07-1994	Information technology – Open Systems Interconnection – Presentation service definition	
X.216 (1994) Amendment 1	 	08-1997	Efficiency enhancements	
X.216 (1994) Amendment 2	 	12-1997	Nested connections functional unit	
X.217	 	04-1995	Information technology – Open Systems Interconnection – Service definition for the Association Control Service Element	
X.217 (1995) Amendment 1	 	10-1996	Support of authentication mechanisms for the connectionless mode	
X.217 (1995) Amendment 2	 	08-1997	Fast-associate mechanism	
X.217bis	 	09-1998	Information technology – Open Systems Interconnection – Service definition for the Application Service Object Association Control Service Element	
X.218	 	03-1993	Reliable Transfer: Model and service definition	
X.219	 	11-1988	Remote Operations: Model, notation and service definition	

X.220-X.229: Connection-mode protocol specifications









X.220	 	03-1993	Use of X.200-Series protocols in CCITT applications	
X.222	 	04-1995	Use of X.25 LAPB-compatible Data Link procedures to provide the OSI connection-mode Data Link service <i>This title results from the modification of ITU-T X.222 (04/95) former title by Amendment 1 (10/96).</i>	
X.222 (1995) Amendment 1	 	10-1996	Frame relay mapping	
X.223	 	11-1993	Use of X.25 to provide the OSI connection-mode Network service for ITU-T applications	
X.223 (1993) Amendment 1	 	10-1996	Transit delay and other refinements	
X.224	 	11-1995	Information technology – Open Systems Interconnection – Protocol for providing the connection-mode transport service	
X.224 (1995) Amendment 1	 	08-1997	Relaxation of class conformance requirements and expedited data service feature negotiation	
X.225	 	11-1995	Information technology – Open Systems Interconnection – Connection-oriented Session protocol: Protocol specification	
X.225 (1995) Amendment 1	 	08-1997	Efficiency enhancements	
X.225 (1995) Amendment 2	 	12-1997	Nested connections functional unit	
X.225 (1995) Technical Cor. 1	 	03-2000		
X.226	 	07-1994	Information technology – Open Systems Interconnection – Connection-oriented Presentation protocol: Protocol specification	
X.226 (1994) Amendment 1	 	08-1997	Efficiency enhancements	
X.226 (1994) Amendment 2	 	12-1997	Nested connections functional unit	











X.227	 	04-1995	Information technology – Open Systems Interconnection – Connection-oriented protocol for the Association Control Service Element: Protocol specification	
X.227 (1995) Amendment 1	 	10-1996	Incorporation of extensibility markers	
X.227 (1995) Amendment 2	 	08-1997	Fast-associate mechanism	
X.227bis	 	09-1998	Information technology – Open Systems Interconnection – Connection-mode protocol for the Application Service Object Association Control Service Element	
X.228	 	11-1988	Reliable Transfer: Protocol specification	
X.228 (1988) Corrigendum 1	 	03-2000		
X.229	 	11-1988	Remote Operations: Protocol specification	

X.230-X.239: Connectionless-mode protocol specifications







X.233	 	08-1997	Information technology – Protocol for providing the connectionless-mode network service: Protocol specification	
X.234	 	07-1994	Information technology – Protocol for providing the OSI connectionless-mode transport service	
X.234 (1994) Amendment 1	 	11-1995	Addition of connectionless-mode multicast capability	
X.235	 	04-1995	Information technology – Open Systems Interconnection – Connectionless Session protocol: Protocol specification	
X.235 (1995) Amendment 1	 	06-1999	Efficiency enhancements	
X.236	 	04-1995	Information technology – Open Systems Interconnection – Connectionless Presentation protocol: Protocol specification	
X.236 (1995) Amendment 1	 	06-1999	Efficiency enhancements	
X.237	 	04-1995	Information technology – Open Systems Interconnection – Connectionless protocol for the Association Control Service Element: Protocol specification	
X.237 (1995) Amendment 1	 	10-1996	Incorporation of extensibility markers and authentication parameters	
X.237 Amd1 (10/96) Technical Cor.1	 	06-1999		
X.237bis	 	09-1998	Information technology – Open Systems Interconnection – Connectionless protocol for the Application Service Object Association Control Service Element	

X.240-X.259: PICS proformas







X.244		11-1988	Procedure for the exchange of protocol identification during virtual call establishment on Packet Switched Public Data Networks <i>Superseded by the more comprehensive description of protocol identifiers contained in X.263</i>	Withdrawn.
X.245	 	04-1995	Information technology – Open Systems Interconnection – Connection-oriented Session protocol: Protocol Implementation Conformance Statement (PICS) proforma	
X.246	 	10-1996	Information technology – Open Systems Interconnection – Connection-oriented Presentation protocol: Protocol Implementation Conformance Statement (PICS) proforma	
X.247	 	10-1996	Information technology – Open Systems Interconnection – Protocol specification for the Association Control Service Element: Protocol Implementation Conformance Statement (PICS) proforma	
X.248	 	11-1995	Information technology – Open Systems Interconnection – Reliable Transfer: Protocol Implementation Conformance Statement (PICS) proforma	

X.249	 	11-1995	Information technology – Open Systems Interconnection – Remote Operations: Protocol Implementation Conformance Statement (PICS) proforma
X.255	 	04-1995	Information technology – Open Systems Interconnection – Connectionless Session protocol: Protocol Implementation Conformance Statement (PICS) proforma
X.256	 	04-1995	Information technology – Open Systems Interconnection – Connectionless Presentation protocol: Protocol Implementation Conformance Statement (PICS) proforma
X.257	 	04-1995	Information technology – Open Systems Interconnection – Connectionless protocol for the Association Control Service Element: Protocol Implementation Conformance Statement (PICS) proforma
X.257 (1995) Amendment 1	 	10-1996	Support of authentication parameters











X.260-X.269: Protocol Identification

X.260	 	10-1996	Information technology – Framework for protocol identification and encapsulation
X.263	 	09-1998	Information technology – Protocol identification in the Network Layer
X.264	 	11-1993	Transport protocol identification mechanism













X.270-X.279: Security Protocols



X.272	 	03-2000	Data compression and privacy over frame relay networks
X.273	 	07-1994	Information technology – Open Systems Interconnection – Network layer security protocol
X.274	 	07-1994	Information technology – Telecommunication and information exchange between systems – Transport layer security protocol

X.280-X.289: Layer Managed Objects

X.281	 	06-1999	Information technology – Elements of management information related to the OSI Physical Layer
X.282	 	06-1999	Elements of management information related to the OSI Data Link layer
X.283	 	12-1997	Information technology – Elements of management information related to the OSI Network layer
X.284	 	12-1997	Information technology – Elements of management information related to the OSI Transport layer
X.287	 	03-1999	Information technology – Open Systems Interconnection – Structure of management information: Managed objects for supporting upper layers































X.290-X.299: Conformance testing

X.290	 	04-1995	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – General concepts
X.291	 	04-1995	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Abstract test suite specification
X.292	 	05-2002	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – The Tree and Tabular Combined Notation (TTCN)
X.293	 	04-1995	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Test realization
X.294	 	04-1995	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Requirements on test laboratories and clients for the conformance assessment process
X.295	 	04-1995	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Protocol profile test specification







X.296	 	11-1995	OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Implementation conformance statements
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X.300-X.399: Interworking between networks

X.300-X.349: General



X.300	 	10-1996	General principles for interworking between public networks and between public networks and other networks for the provision of data transmission services
X.301	 	10-1996	Description of the general arrangements for call control within a subnetwork and between subnetworks for the provision of data transmission services
X.302	 	11-1988	Description of the general arrangements for internal network utilities within a subnetwork and intermediate utilities between subnetworks for the provision of data transmission services
X.305	 	11-1988	Functionalities of subnetworks relating to the support of the OSI connection-mode network service
X.320	 	10-1996	General arrangements for interworking between Integrated Services Digital Networks (ISDNs) for the provision of data transmission services
X.321	 	10-1996	General arrangements for interworking between Circuit-Switched Public Data Networks (CSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services <i>This Recommendation is also included but not published in I series under alias number I.540</i>
X.322	 	11-1988	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Circuit-Switched Public Data Networks (CSPDNs) for the provision of data transmission services
X.323	 	11-1988	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs)
X.324	 	11-1988	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and public mobile systems for the provision of data transmission services
X.325	 	10-1996	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services <i>This Recommendation is also included but not published in I series under alias number I.550</i>
X.326	 	11-1988	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Common Channel Signalling Network (CCSN)
X.327	 	11-1993	General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and private data networks for the provision of data transmission services
X.328	 	10-1996	General arrangements for interworking between Public Data Networks providing frame relay data transmission services and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services
X.329	 	03-2000	General arrangements for interworking between networks providing frame relay data transmission services and B-ISDN
X.340	 	03-1993	General arrangements for interworking between a Packet-Switched Public Data Network (PSPDN) and the international telex network

X.350-X.369: Satellite data transmission systems







X.350	 	12-1997	General interworking requirements to be met for data transmission in international public mobile satellite systems
X.351	 	11-1988	Special requirements to be met for Packet Assembly/Disassembly facilities (PADs) located at or in association with coast earth stations in the public mobile satellite service
X.352	 	11-1988	Interworking between Packet-Switched Public Data Networks and

			public maritime mobile satellite data transmission systems	
X.353	 	11-1988	Routing principles for interconnecting public maritime mobile satellite data transmission systems with public data networks	
X.361	 	10-1996	Connection of VSAT systems with Packet-Switched Public Data Networks based on X.25 procedures	

















X.370-X.399: IP-based networks

X.370		11-1988	Arrangements for the transfer of internetwork management information <i>Deleted because it was such a general Recommendation that it served no useful practical purpose</i>	Withdrawn.
X.371/Y.1402	 	02-2001	General arrangements for interworking between Public Data Networks and the Internet	

X.400-X.499: Message Handling Systems

F.400/X.400	 	06-1999	Message handling services: Message handling system and service overview	Pre-published.
X.402	 	06-1999	Information technology – Message Handling Systems (MHS): Overall architecture	
X.403		11-1988	Message handling systems: conformance testing <i>This Recommendation was withdrawn because conformance testing concepts and methods defined in it were related to the 1984 MHS Recommendations and were not aligned with either the first or second versions of conformance testing standards. ITU-T X.480 (1992) refers to the 1988 "Blue Book" MHS Recommendations and was better aligned with the testing standards</i>	Withdrawn.
X.404	 	06-1999	Information technology – Message Handling Systems (MHS): MHS routing – Guide for messaging systems managers	
X.407		11-1988	Message handling systems: Abstract service definition conventions <i>This Recommendation was not referenced from any Recommendation and some of its technical content was contained in ITU-T X.402 (1995)</i>	Withdrawn.
X.408	 	11-1988	Message handling systems: Encoded information type conversion rules	
X.411	 	06-1999	Information technology – Message Handling Systems (MHS): Message transfer system: Abstract service definition and procedures	
X.412	 	06-1999	Information technology – Message Handling Systems (MHS): MHS routing	
X.413	 	06-1999	Information technology – Message Handling Systems (MHS): Message store – Abstract service definition	
X.419	 	06-1999	Information technology – Message Handling Systems (MHS): Protocol specifications	
X.420	 	06-1999	Information technology – Message Handling Systems (MHS): Interpersonal messaging system	
X.421	 	06-1999	Message handling systems: COMFAX use of MHS	
X.435	 	06-1999	Information technology – Message Handling Systems (MHS): Electronic data interchange messaging system	
X.440	 	06-1999	Message handling systems: Voice messaging system	Pre-published.
X.445	 	04-1995	Asynchronous protocol specification – Provision of OSI connection mode network service over the telephone network	
X.446	 	08-1997	Common messaging call API	
X.460	 	04-1995	Information technology – Message Handling Systems (MHS) Management: Model and architecture	
X.462	 	10-1996	Information technology – Message Handling Systems (MHS) Management: Logging information	
X.467	 	10-1996	Information technology – Message Handling Systems (MHS) Management: Message Transfer Agent management	
X.480		09-1992	Message handling systems and directory services – conformance testing	Withdrawn.



Withdrawn as it references documents that have been deleted by the ITU



X.481	 	06-1999	Message handling systems – P2 protocol PICS proforma	
X.482	 	06-1999	Message handling systems – P1 Protocol PICS proforma	
X.483	 	06-1999	Message handling systems – P3 Protocol PICS proforma	
X.484	 	06-1999	Message handling systems – P7 protocol PICS proforma	
X.485	 	09-1992	Message handling systems: Voice messaging system Protocol Implementation Conformance Statement (PICS) proforma	
X.486	 	06-1999	Message handling systems – Pedi protocol PICS proforma	
X.487	 	06-1999	Message handling systems – IPM-MS attributes PICS proforma	
X.488	 	06-1999	Message handling systems – EDI-MS attributes PICS proforma	



X.500-X.599: Directory



X.500	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Overview of concepts, models and services	
X.501	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Models	
X.509	 	03-2000	Information technology – Open Systems Interconnection – The Directory: Public-key and attribute certificate frameworks	
X.509 (2000) Technical Cor.1	 	10-2001		
X.509 (2000) Technical Cor.2	 	04-2002		
X.509 (2000) Corrigendum 3	 	04-2004	<i>This corrigendum cancels and replaces the text approved on 2003-02-13</i>	Pre-published.
X.511	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Abstract service definition	
X.518	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Procedures for distributed operation	
X.519	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Protocol specifications	
X.520	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Selected attribute types	
X.520 (2001) Technical Cor.1	 	04-2002		
X.521	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Selected object classes	
X.525	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Replication	
X.530	 	02-2001	Information technology – Open Systems Interconnection – The Directory: Use of systems management for administration of the Directory	
X.581		11-1995	Information technology – Open Systems Interconnection – The Directory: Directory Access Protocol – Protocol Implementation Conformance Statement (PICS) proforma <i>ITU-T Recs. X.581 and X.582 contain the PICS proforma based on the 1988 (first) edition of the Directory Specifications, while ITU-T Recs. X.583 through X.586 provide the PICS proformas for the second edition of the Directory Specifications. Since there are no plans to update these proformas to align with the new 2000/2001 (fourth) edition of the Directory specifications, X.581 and X.582 are considered as obsolete and are withdrawn</i>	Withdrawn.
X.582		11-1995	Information technology – Open Systems Interconnection – The Directory: Directory System Protocol – Protocol Implementation Conformance Statement (PICS) proforma <i>ITU-T Recs. X.581 and X.582 contain the PICS proforma based on the 1988 (first) edition of the Directory Specifications, while ITU-T Recs. X.583 through X.586 provide the PICS proformas for the second</i>	Withdrawn.

edition of the Directory Specifications. Since there are no plans to update these proformas to align with the new 2000/2001 (fourth) edition of the Directory specifications, X.581 and X.582 are considered as obsolete and are withdrawn

X.583   12-1997 Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) Proforma for the Directory Access Protocol

X.584   12-1997 Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) Proforma for the Directory System Protocol



X.585   12-1997 Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) Proforma for the Directory Operational Binding Management Protocol



X.586   12-1997 Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) Proforma for the Directory Information Shadowing Protocol



X.600-X.699: OSI networking and system aspects



X.600-X.629: Networking



X.601   03-2000 Multi-peer communications framework



X.602   04-2004 Information technology – Group management protocol Pre-published.



X.603   04-2004 Information technology – Relayed multicast protocol: Framework Pre-published.



X.605   09-1998 Information technology – Enhanced Communications Transport Service definition



X.606   10-2001 Information technology – Enhanced Communications Transport Protocol: Specification of simplex multicast transport



X.606.1   02-2003 Information technology – Enhanced Communications Transport Protocol: Specification of QoS management for simplex multicast transport



X.610   09-1992 Provision and support of the OSI connection-mode Network service



X.612   09-1992 Information technology – Provision of the OSI connection-mode network service by packet-mode terminal equipment connected to an Integrated Services Digital Network (ISDN)

X.613   09-1992 Information technology – Use of X.25 Packet Layer Protocol in conjunction with X.21/X.21 bis to provide the OSI connection-mode Network service



X.614   09-1992 Information technology – Use of X.25 Packet Layer Protocol to provide the OSI connection-mode Network service over the telephone network

X.622   07-1994 Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by an X.25 Subnetwork



X.623   07-1994 Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by a subnetwork that provides the OSI Data Link service











X.625   10-1996 Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by ISDN circuit-switched B-channels

X.630-X.639: Efficiency





X.630   09-1998 Efficient Open Systems Interconnection (OSI) operations

X.633   10-1996 Information technology – Open Systems Interconnection – Network Fast Byte Protocol























X.633 Addendum 1   09-1998 SDL specifications
This text is published in English only. It includes one diskette containing the SDT files of the SDL specifications of the Network Fast Byte protocol

X.634	 	10-1996	Information technology – Open Systems Interconnection – Transport Fast Byte Protocol	
X.634 Addendum 1	 	09-1998	SDL specifications <i>This text is published in English only. This Annex includes one diskette containing the SDT files of the SDL specifications of the Transport Fast Byte protocol.</i>	
X.637	 	10-1996	Basic connection-oriented common upper layer requirements	
X.638	 	10-1996	Minimal OSI facilities to support basic communications applications	
X.639	 	10-1996	Basic connection-oriented requirements for ROSE-based profiles	










X.640-X.649: Quality of service
















X.641	 	12-1997	Information technology – Quality of service: framework	
X.642	 	09-1998	Information technology – Quality of service – Guide to methods and mechanisms	

X.650-X.679: Naming, Addressing and Registration

X.650	 	10-1996	Information technology – Open Systems Interconnection – Basic Reference Model: Naming and addressing	
X.660	 	09-1992	Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: General procedures	
X.660 (1992) Amendment 1	 	10-1996	Incorporation of object identifiers components	
X.660 (1992) Amendment 2	 	08-1997	Incorporation of the root arcs of the object identifier tree	
X.662	 	08-1997	Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: Registration of values of RH-name-tree components for joint ISO and ITU-T use	
X.665	 	09-1992	Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: Application processes and application entities	
X.666	 	08-1997	Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: Assignment of international names for use in specific contexts	
X.669	 	10-1996	Procedures for the operation of OSI registration authorities: Registration procedures for the itu-t subordinate arcs	
X.669 (1996) Corrigendum 1	 	06-1999		
X.670	 	10-1996	Procedures for registration agents operating on behalf of organizations to register organization names subordinate to country names	
X.671	 	10-1996	Procedures for a registration authority operating on behalf of countries to register organization names subordinate to country names	











X.680-X.699: Abstract Syntax Notation One (ASN.1)

X.680		07-2002	Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation	Available only in PDF.
X.680 (2002) Amendment 1	 	10-2003	Support for EXTENDED-XER	Pre-published.
X.681		07-2002	Information technology – Abstract Syntax Notation One (ASN.1): Information object specification	Available only in PDF.
X.681 (2002) Amendment 1	 	10-2003	Support for EXTENDED-XER	Pre-published.
X.682		07-2002	Information technology – Abstract Syntax Notation One (ASN.1): Constraint specification	Available only in PDF.
X.683		07-2002	Information technology – Abstract Syntax Notation One (ASN.1): Parameterization of ASN.1 specifications	Available only in PDF.
X.690		07-2002	Information technology – ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)	Available only in PDF.














X.690 (2002) Amendment 1	 	10-2003	Support for EXTENDED-XER	Pre-published.
X.691		07-2002	Information technology – ASN.1 encoding rules: Specification of Packed Encoding Rules (PER)	Available only in PDF.
X.691 (2002) Erratum 1	 	06-2003		
X.691 (2002) Amendment 1	 	10-2003	Support for EXTENDED-XER	Pre-published.
X.692		03-2002	Information technology – ASN.1 encoding rules: Specification of Encoding Control Notation (ECN) <i>An electronic version of Annex E of this Recommendation with an associated ECN Huffman encoding macro is also published independently and freely available from ITU website</i>	Available only in PDF.
X.692 (2002) Annex E	 	03-2002	Support for Huffman encodings <i>This electronic file reproduces Annex E of ITU-T Rec. X.692 (03/2002) and contains an ECN Huffman encoding macro in Visual Basic for Word 2000</i>	
X.693		12-2001	Information technology – ASN.1 encoding rules: XML Encoding Rules (XER)	Available only in PDF.
X.693 (2001) Amendment 1	 	10-2003	XER encoding instructions and EXTENDED-XER	Pre-published.
X.694	 	01-2004	Information technology – ASN.1 encoding rules: Mapping W3C XML schema definitions into ASN.1	Pre-published.

X.700-X.799: OSI management

X.700-X.709: Systems Management framework and architecture

X.700	 	09-1992	Management framework for Open Systems Interconnection (OSI) for CCITT applications	
X.701	 	08-1997	Information technology – Open Systems Interconnection – Systems management overview	
X.702	 	11-1995	Information technology – Open Systems Interconnection – Application context for systems management with transaction processing	
X.703	 	10-1997	Information technology – Open Distributed Management Architecture	
X.703 (1997) Amendment 1	 	06-1998	Support using Common Object Request Broker Architecture (CORBA)	





X.710-X.719: Management Communication Service and Protocol

















































X.710	 	10-1997	Information technology – Open Systems Interconnection – Common Management Information service	
X.711	 	10-1997	Information technology – Open Systems Interconnection – Common Management Information Protocol: Specification	
X.711 (1997) Technical Cor. 1		03-1999		Available only in PDF.
X.711 (1997) Technical Cor.2	 	02-2000	Revision to include ASN.1:1997	
X.712	 	09-1992	Information technology – Open Systems Interconnection – Common management information protocol: Protocol Implementation Conformance Statement (PICS) proforma	
X.712 (1992) Technical Cor. 1		10-1996		Available only in PDF.
X.712 (1992) Technical Cor. 2		10-1996		Available only in PDF.
X.712 (1992) Technical Cor. 3	 	06-1998		

X.720-X.729: Structure of Management Information

X.720	 	01-1992	Information technology – Open Systems Interconnection – Structure of management information: Management information model	
X.720 (1992) Technical Cor. 1	 	02-1994		
X.720 (1992) Amendment 1	 	11-1995	Generalization of terms	
X.721	 	02-1992	Information technology – Open Systems Interconnection – Structure of management information: Definition of management information	
X.721 (1992) Technical Cor.1	 	02-1994		
X.721 (1992) Technical Cor.2	 	10-1996		
X.721 (1992) Technical Cor.3	 	06-1998		
X.721 (1992) Technical Cor.4	 	02-2000	Use of ASN.1 1997	
X.721 (1992) Amendment 1	 	08-2001	States to support Lifecycle	
X.722	 	01-1992	Information technology – Open Systems Interconnection – Structure of management information: Guidelines for the definition of managed objects	
X.722 (1992) Amendment 1	 	11-1995	Set by create and component registration	
X.722 (1992) Technical Cor. 1	 	10-1996		
X.722 (1992) Amendment 2	 	08-1997	Addition of the NO-MODIFY syntax element and guidelines extension	
X.722 (1992) Amendment 3	 	08-1997	Guidelines for the use of Z in formalizing the behaviour of managed objects	
X.722 (1992) Technical Cor.2	 	02-2000	Revision of GDMO to include ASN.1:1997	
X.723	 	11-1993	Information technology – Open Systems Interconnection – Structure of management information: Generic management information	
X.723 (1993) Technical Cor. 1	 	06-1998		
X.723 (1993) Technical Cor.2	 	02-2000		
X.724	 	10-1996	Information technology – Open Systems Interconnection – Structure of management information: Requirements and guidelines for implementation conformance statement proformas associated with OSI management	
X.725	 	11-1995	Information technology – Open Systems Interconnection – Structure of management information: General Relationship Model	
X.727	 	03-1999	Information technology – Open Systems Interconnection – Structure of management information: Systems management application layer managed objects	
X.727	 	03-1999	Information technology – Open Systems Interconnection – Structure of management information: Systems management application layer managed objects	


X.730-X.799: Management functions and ODMA functions





















X.730	 	01-1992	Information technology – Open Systems Interconnection – Systems Management: Object management function	
X.730 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	

X.730 (1992) Am1Technical Cor.1	 	10-1996		
X.731	 	01-1992	Information technology – Open Systems Interconnection – Systems management: State management function	
X.731 (1992) Technical Cor. 1	 	04-1995		
X.731 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	
X.731 (1992) Am1Technical Cor.1	 	10-1996		
X.731 (1992) Technical Cor. 2	 	01-2001	Clarification of state change event	
X.731 (1992) Amendment 2	 	01-2001	Amendment to support LIFECYCLE state	
X.732	 	01-1992	Information technology – Open Systems Interconnection – Systems Management: Attributes for representing relationships	
X.732 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	
X.732 (1992) Am1Technical Cor.1	 	10-1996		
X.733	 	02-1992	Information technology – Open Systems Interconnection – Systems Management: Alarm reporting function	
X.733 (1992) Technical Cor. 1	 	02-1994		
X.733 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	
X.733 (1992) Am1Technical Cor.1	 	10-1996		
X.733 (1992) Technical Cor. 2	 	03-1999		
X.734	 	09-1992	Information technology – Open Systems Interconnection – Systems Management: Event report management function	
X.734 (1992) Technical Cor. 1	 	02-1994		
X.734 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	
X.734 (1992) Am1Technical Cor.1	 	10-1996		
X.734 (1992) Technical Cor. 2	 	03-1999		
X.735	 	09-1992	Information technology – Open Systems Interconnection – Systems Management: Log control function	
X.735 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	
X.735 (1992) Am1Technical Cor.1	 	10-1996		
X.735 (1992) Technical Cor.1	 	03-2001		
X.736	 	01-1992	Information technology – Open Systems Interconnection – Systems	














			Management: Security alarm reporting function	
X.736 (1992) Amendment 1	 	04-1995	Implementation Conformance Statement proformas	
X.736 (1992) Amd.1 Technical Cor.1	 	10-1996		
X.737	 	11-1995	Information technology – Open Systems Interconnection – Systems Management: Confidence and diagnostic test categories	
X.737 (1995) Technical Cor. 1	 	06-1998		
X.737 (1995) Technical Cor.2	 	02-2000	Revision to include ASN.1:1997	
X.737 (1995) Technical Cor.3	 	03-2001		
X.738	 	11-1993	Information technology – Open Systems Interconnection – Systems management: Summarization function	
X.738 (1993) Amendment 1	 	10-1996	Implementation conformance statement proformas	
X.738 (1993) Technical Cor. 1	 	06-1998		
X.738 (1993) Technical Cor.2	 	02-2000	Revision to include ASN.1:1997	
X.739	 	11-1993	Information technology – Open Systems Interconnection – Systems Management: Metric objects and attributes	
X.739 (1993) Amendment 1	 	08-1997	Implementation conformance statement proformas	
X.739 (1993) Technical Cor. 1	 	06-1998		
X.740	 	09-1992	Information technology – Open Systems Interconnection – Systems Management: Security audit trail function	
X.740 (1992) Technical Cor. 1	 	04-1995		
X.740 (1992) Technical Cor. 2	 	10-1996		
X.740 (1992) Technical Cor. 3	 	06-1998		
X.741	 	04-1995	Information technology – Open Systems Interconnection – Systems management: Objects and attributes for access control	
X.741 (1995) Technical Cor. 1	 	10-1996		
X.741 (1995) Technical Cor. 2	 	06-1998		
X.741 (1995) Technical Cor.3	 	02-2000		
X.742	 	04-1995	Information technology – Open Systems Interconnection – Systems management: Usage metering function for accounting purposes	
X.742 (1995) Amendment 1	 	10-1997	Implementation conformance statement proformas	
X.742 (1995) Technical Cor. 1	 	06-1998		
X.742 (1995)	 	02-2000		







Technical Cor.2

X.743	 	06-1998	Information technology – Open Systems Interconnection – Systems Management: Time Management Function	
X.743 (1998) Technical Cor.1	 	03-2001		
X.744	 	10-1996	Information technology – Open Systems Interconnection – Systems Management: Software management function	
X.744 (1996) Technical Cor. 1	 	06-1998	<i>This Technical Corrigendum applies to the English electronic version of ITU-T Rec. X.744, and is available in electronic format in English only.</i>	
X.744 (1996) Technical Cor.2	 	02-2000	Revision to include ASN.1:1997	
X.744 (1996) Technical Cor.3	 	03-2001		
X.744.1	 	03-2003	CORBA-based TMN software management service	
X.745	 	11-1993	Information technology – Open Systems Interconnection – Systems Management: Test management function	
X.745 (1993) Technical Cor. 1	 	08-1997		
X.745 (1993) Technical Cor. 2	 	06-1998		
X.745 (1993) Technical Cor.3	 	02-2000		
X.746 Erratum 1	 	02-2000	Information technology – Open Systems Interconnection – Systems Management: Scheduling function	
X.748	 	03-1999	Information technology – Open Systems Interconnection – Systems Management: Response Time Monitoring Function	
X.749	 	08-1997	Information technology – Open Systems Interconnection – Systems Management: Management domain and management policy management function	
X.750	 	10-1996	Information technology – Open Systems Interconnection – Systems Management: Management knowledge management function	
X.750 (1996) Amendment 1	 	10-1997	Extension for General Relationship model	
X.750 (1996) Technical Cor.1	 	02-2000	Revision to include ASN.1:1997	
X.751	 	11-1995	Information technology – Open Systems Interconnection – Systems Management: Changeover function	
X.751 (1995) Technical Cor. 1	 	06-1998		
X.751 (1995) Technical Cor.2	 	02-2000	Revision to include ASN.1:1997	
X.753	 	10-1997	Information technology – Open Systems Interconnection – Systems management: Command Sequencer for Systems Management	
X.754	 	02-2000	Enhanced Event Control Function	
X.770	 	01-2001	ODMA notification dispatch function	
X.780	 	01-2001	TMN guidelines for defining CORBA managed objects	
X.780 (2001) Corrigendum 1	 	10-2001		
X.780 (2001) Corrigendum 2	 	05-2002		
X.780 (2001) Amendment 1	 	05-2002	System objects and user guide for bulk attribute retrieval	
X.780.1	 	08-2001	TMN guidelines for defining coarse-grained CORBA managed object interfaces	

X.780.1 (2001) Corrigendum 1	 	05-2002		
X.780.1 (2001) Amendment 1	 	05-2002	System façades and user guide for bulk attribute retrieval	
X.781	 	08-2001	Requirements and guidelines for Implementation Conformance Statements proformas associated with CORBA-based systems	
X.790	 	11-1995	Trouble management function for ITU-T applications	
X.790 (1995) Amendment 1	 	10-1996	Implementation conformance statement proformas	
X.790 (1995) Corrigendum 1	 	03-1999		
X.790 (1995) Corrigendum 2	 	03-2001		
X.791	 	10-1996	Profile for trouble management function for ITU-T applications	
X.792	 	03-1999	Configuration audit support function for ITU-T applications	
X.792 (1999) Corrigendum 1	 	08-2001		







X.800-X.849: Security

X.800	 	03-1991	Security architecture for Open Systems Interconnection for CCITT applications	
X.800 (1991) Amendment 1	 	10-1996	Layer Two Security Service and Mechanisms for LANs	
X.802	 	04-1995	Information technology – Lower layers security model	
X.803	 	07-1994	Information technology – Open Systems Interconnection – Upper layers security model	
X.805	 	10-2003	Security architecture for systems providing end-to-end communications	
X.810	 	11-1995	Information technology – Open Systems Interconnection – Security frameworks for open systems: Overview	
X.811	 	04-1995	Information technology – Open Systems Interconnection – Security frameworks for open systems: Authentication framework	
X.812	 	11-1995	Information technology – Open Systems Interconnection – Security frameworks for open systems: Access control framework	
X.813	 	10-1996	Information technology – Open Systems Interconnection – Security frameworks for open systems: Non-repudiation framework	
X.814	 	11-1995	Information technology – Open Systems Interconnection – Security frameworks for open systems: Confidentiality framework	
X.815	 	11-1995	Information technology – Open Systems Interconnection – Security frameworks for open systems: Integrity framework	
X.816	 	11-1995	Information technology – Open Systems Interconnection – Security frameworks for open systems: Security audit and alarms framework	
X.830	 	04-1995	Information technology – Open Systems Interconnection – Generic upper layers security: Overview, models and notation	
X.831	 	04-1995	Information technology – Open Systems Interconnection – Generic upper layers security: Security Exchange Service Element (SESE) service definition	
X.832	 	04-1995	Information technology – Open Systems Interconnection – Generic upper layers security: Security Exchange Service Element (SESE) protocol specification	
X.833	 	04-1995	Information technology – Open Systems Interconnection – Generic upper layers security: Protecting transfer syntax specification	
X.834	 	10-1996	Information technology – Open Systems Interconnection – Generic Upper Layers Security: Security Exchange Service Element (SESE) Protocol Implementation Conformance Statement (PICS) proforma	
X.835	 	10-1996	Information technology – Open Systems Interconnection – Generic Upper Layers Security: Protecting transfer syntax Protocol Implementation Conformance Statement (PICS) proforma	









X.841	 	10-2000	Information technology – Security techniques – Security information objects for access control
X.842	 	10-2000	Information technology – Security techniques – Guidelines for the use and management of trusted third party services
X.843	 	10-2000	Information technology – Security techniques – Specification of TTP services to support the application of digital signatures

X.850-X.899: OSI applications

















X.850-X.859: Commitment, Concurrency and Recovery

X.851	 	12-1997	Information technology – Open Systems Interconnection – Service definition for the Commitment, Concurrency and Recovery service element
X.852	 	12-1997	Information technology – Open Systems Interconnection – Protocol for the Commitment, Concurrency and Recovery service element: Protocol specification
X.853	 	11-1995	Information technology – Open Systems Interconnection – Protocol for the Commitment, Concurrency and Recovery service element: Protocol Implementation Conformance Statement (PICS) proforma







X.860-X.879: Transaction processing


X.860	 	12-1997	Open Systems Interconnection – Distributed Transaction Processing: Model
X.861	 	12-1997	Open Systems Interconnection – Distributed Transaction Processing: Service definition
X.862	 	12-1997	Open Systems Interconnection – Distributed Transaction Processing: Protocol specification
X.863	 	07-1994	Information technology – Open Systems Interconnection – Distributed Transaction Processing: Protocol Implementation Conformance Statement (PICS) proforma

X.880-X.899: Remote operations

X.880	 	07-1994	Information technology – Remote Operations: Concepts, model and notation
X.880 (1994) Technical Cor. 1	 	07-1995	
X.880 (1994) Amendment 1	 	11-1995	Built-in operations
X.881	 	07-1994	Information technology – Remote Operations: OSI realizations – Remote Operations Service Element (ROSE) service definition
X.881 (1994) Amendment 1	 	11-1995	Mapping to A-UNIT-DATA service and built-in operations
X.882	 	07-1994	Information technology – Remote Operations: OSI realizations – Remote Operations Service Element (ROSE) protocol specification
X.882 (1994) Technical Cor. 1	 	07-1995	
X.882 (1994) Amendment 1	 	11-1995	Mapping to A-UNIT-DATA service and built-in operations

X.900-X.999: Open distributed processing



















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









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



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