Series A : Organization of the work of ITU-T

Sta Pro to Co Ge org Co an Fo	ork methods for study groups of the ITU Telecommunication andardization Sector (ITU-T) esentation of contributions relative to the study of Questions assigned ITU-T ommunication process between ITU-T and Forums and Consortia eneric procedures for including references to documents of other ganizations in ITU-T Recommendations opperation and exchange of information between ITU-T and national id regional standards development organizations	
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an Fo	d regional standards development organizations	
	ocus groups: Working methods and procedures	
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) Su	upplements to ITU-T Recommendations	
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) Gu	uidelines on interoperability experiments	
	TF and ITU-T collaboration guidelines	
) Gi	Guidelines on interoperability experiments

Series D : General tariff principles

Number	Approval Date	Recommendation Title	Status
D.000	06-2002	Terms and definitions for the D-series Recommendations	
D.1	07-1991	General principles for the lease of international (continental and intercontinental) private telecommunication circuits and networks	
.3	06-1992	Principles for the lease of analogue international circuits for private service	
.4	09-2005	Special conditions for the lease of international (continental and intercontinental) sound- and television-programme circuits for private service	
0.5	11-1988	Costs and value of services rendered as factors in the fixing of rates	
.7	01-1992	Concept and implementation of "one-stop shopping" for international private leased telecommunication circuits	
.8	11-1988	Special conditions for the lease of international end-to-end digital circuits for private service	
0.9	11-1988	Private leasing of transmitters or receivers	
0.10	07-1991	General tariff principles for international public data communication services	
.11	03-1991	Special tariff principles for international packet-switched public data communication services by means of the virtual call facility	
.12	11-1988	Measurement unit for charging by volume in the international packet- switched data communication service	
.13	11-1988	Guiding principles to govern the apportionment of accounting rates in international packet-switched public data communication relations	
.15	11-1988	General charging and accounting principles for non-voice services provided by interworking between public data networks	
.20	11-1988	Special tariff principles for the international circuit-switched public data communication services	
0.21	11-1988	Special tariff principles for short transaction transmissions on the international packet-switched public data networks using the fast select facility with restriction	
0.30	11-1988	Implementation of reverse charging on international public data communication services	
.35	01-1992	General charging principles in the international public message handling services and associated applications	
0.36	03-1995	General accounting principles applicable to message handling services and associated applications	
0.37	07-1996	Accounting and settlement principles applicable to the provision of public directory services between interconnected Directory Management Domains	
0.40	06-1992	General tariff principles applicable to telegrams exchanged in the international public telegram service	
.41	11-1988	Introduction of accounting rates by zones in the international public telegram service	
.42	11-1988	Accounting in the international public telegram service	
.43	11-1988	Partial and total refund of charges in the international public telegram service	

D.45	06-1992	Charging and accounting principles for the international telemessage service
D.50	10-2000	International Internet connection
D.50 (2000) Amendment 1	06-2004	New Appendix I – General considerations for charging criteria and options for international Internet connectivity
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	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.79	07-1991	Charging and accounting principles for the international videotex 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	03-1995	Charging, billing, international accounting and settlement in the maritime mobile service
D.91	07-1996	Transmission in encoded form of maritime telecommunications accounting information
D.91 (1996) Amendment 1	06-1998	Year 2000 issue and its impact on ITU-T D.91 application
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.100	11-1988	Charging for international calls in manual or semi-automatic operating
D.103	06-1992	Charging in automatic service for calls terminating on a recorded announcement stating the reason for the call not being completed
D.104	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
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	06-2004	Tariff principles and accounting for the International Freephone Service (IFS)
D.116	06-2004	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 – Guidelines 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.140 Supplement 3	06-2004	Updated teledensities and indicative target settlement rates (1 January 2004)
D.150	06-1999	New system for accounting in international telephony
D.151	11-1988	Old system for accounting in international telephony
D.155	07-1996	Guiding principles governing the apportionment of accounting rates in intercontinental telephone relations
D.160	11-1988	Mode of application of the flat-rate price procedure set forth in 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
D.176 (1997) Amendment 1	06-1998	Year 2000 issue and its impact on ITU-T D.176 application
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	09-2005	Occasional provision of circuits for international sound- and television- programme transmissions
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	06-2002	Exchange of international traffic accounting data between Administrations using electronic data interchange (EDI) techniques
D.192	06-1992	Principles for charging and accounting of service telecommunications
D.193	11-1988	Special tariff principles for privilege telecommunications
D.195	11-2003	Time-scale for settlement of accounts for international telecommunication services
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	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	03-1995	Principles for charging and billing, accounting and reimbursements for universal personal telecommunication
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.300R	03-1995	Determination of accounting rate shares in telephone relations between countries in Europe and the Mediterranean Basin

D.301R	03-1995	Determination of accounting rate shares and collection charges in telex relations between countries in Europe and the Mediterranean Basin	
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	
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	
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	
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	
D.400R	12-1999	Accounting rates applicable to direct traffic relations in voice telephony between countries in Latin America and the Caribbean	
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.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.604R	01-2005	The last international transit center pays the traffic	
D.606R	11-1988	Preferential rates in telecommunication relations between countries in Africa	
D.Sup1	11-1988	Cost and tariff study method	Available only in PDF.
D.Sup2	11-1988	Method for carrying out a cost price study by regional tariff groups	
D.Sup3	03-1993	Handbook on the methodology for determining costs and establishing national tariffs	

Recommendation count: 221

Series E : General tariff principles

Number	Approval Date	Recommendation Title	Status
E.100	11-1988	Definitions of terms used in international telephone operation	
E.104	02-1995	International telephone directory assistance service and public access	
E.104	08-1992	International telephone service	
E.105	10-2003	International Emergency Preference Scheme (IEPS) for disaster relief	
L.100	10-2003	operations	
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	02-2006	Computerized directory assistance	Pre-published
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	11-1988	Instructions for users of the international telephone service	
E.121	06-2004	Pictograms, symbols and icons to assist users of the telephone and telefax services	
E.121 (2004) Erratum 1	10-2004		
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	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.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.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.164	02-2005	The international public telecommunication numbering plan
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	05-2004	Operational and administrative issues associated with national implementations of the ENUM functions
E.164 Supplement 4	05-2004	Operational and administrative issues associated with the implementation of ENUM for non-geographic country codes
E.164.1	02-2005	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)
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
E.167	11-1988	ISDN Network Identification Codes
E.168	05-2002	Application of E.164 numbering plan for UPT

E.168 (2002) Amendment 1	05-2004	New Appendix I
E.168.1	02-2005	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
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	10-1992	Traffic routing
E.172	10-1992	ISDN routing plan
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/Q.35	03-1998	Technical characteristics of tones for the telephone service
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	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.202	10-1992	Network operational principles for future public mobile systems and services
E.210	11-1988	Ship station identification for VHF/UHF and maritime mobile-satellite services
E.212	05-2004	The international identification plan for mobile terminals and mobile users
E.212 (2004) Erratum 1	10-2004	
E.213	11-1988	Telephone and ISDN numbering plan for land mobile stations in public land mobile networks (PLMN)
E.214	02-2005	Structure of the land mobile global title for the signalling connection control part (SCCP)

E.217	05-2002	Maritime communications – Ship station identity
E.218	05-2004	Management of the allocation of terrestrial trunk radio Mobile Country Codes
E.220	02-1996	Interconnection of public land mobile networks (PLMN)
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
D.104	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
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	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	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
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
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.401	11-1988	Statistics for the international telephone service (number of circuits in operation and volume of traffic)
E.408	05-2004	Telecommunication networks security requirements
E.409	05-2004	Incident organization and security incident handling: Guidelines for telecommunication organizations
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	02-2005	Framework for the network management of IP-based networks
E.418	05-2003	Framework for network management of IMT-2000 networks
E.419	02-2006	Business oriented Key Performance Indicators for management of networks and services
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.470	02-2005	Operational considerations for QoS of voice over IP-based networks with PSTN-IP-PSTN architecture
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	06-1992	Forecasting international traffic
E.507	11-1988	Models for forecasting international traffic
E.508	10-1992	Forecasting new telecommunication services
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	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	03-1993	Terms and definitions of traffic engineering
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 acess networks based on hybrid fiber/coax system
E.700	10-1992	Framework of the E.700-Series Recommendations
E.701	10-1992	Reference connections for traffic engineering
E.711	10-1992	User demand modelling
E.712	10-1992	User plane traffic modelling
E.713	10-1992	Control plane traffic modelling
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.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	03-2000	Introduction to the E.750 series of Recommendations on traffic engineering aspects of networks supporting personnal 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	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	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	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	06-2002	Framework of a service level agreement
E.862	06-1992	Dependability planning of telecommunication networks
E.880	11-1988	Field data collection and evaluation on the performance of equipment, networks and services
E.910	12-2005	Procedures for registration within the domain ".int"
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.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

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F.1	03-1998	Operational provisions for the international public telegram service	
F.2	11-1988	Operational provisions for the collection of telegram charges	
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.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	10-1996	Collection and dissemination of official service information	
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	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	
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	03-1991	International public telemessage service	
F.41	03-1991	Interworking between the telemessage service and the international public telegram 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	

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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
F.421	11-1988	Message handling services: Intercommunication between the IPM service and the telex service
F.421 Errata	12-1999	
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
F.89	08-1992	Status enquiry function in the international telex service
F.100	11-1988	Scheduled radiocommunication service
F.104	10-1991	International leased circuit services – Customer circuit designations
F.105	11-1988	Operational provisions for phototelegrams
F.106	11-1988	Operational provisions for private phototelegraph calls
F.107	11-1988	Rules for phototelegraph calls established over circuits normally used for telephone traffic
F.108	11-1988	Operating rules for international phototelegraph calls to multiple destinations
F.110	07-1996	Operational provisions for the maritime mobile service
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
E.210	11-1988	Ship station identification for VHF/UHF and maritime mobile-satellite services
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.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.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.182bis	10-1996	Guidelines for the support of the communication of documents using Group 3 facsimile between user terminals via public networks
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.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/X.400	06-1999	Message handling system and service overview
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
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
F.421 Errata	12-1999	
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	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.581	03-1993	Guidelines for programming communication interfaces (PCIs) definition: Service Recommendation

F.600	04-2004	Service and operational principles for public data transmission service		
F.700	11-2000	Framework Recommendation for multimedia services		
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.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.724	09-2005	Service description and requirements for videotelephony services over IP networks		
F.731	07-1997	Multimedia Conference Services in the ISDN		
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F.733	09-2005	Service description and requirements for multimedia conference services over IP networks		
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F.761	11-1988	Service-oriented requirements for telewriting applications		
F.811	07-1996	Broadband connection-oriented bearer service		
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F.813	02-1995	Virtual path service for reserved and permanent communications		
F.850	03-1993	Principles of Universal Personal Telecommunication (UPT)		
F.851	02-1995	Universal Personal Telecommunication (UPT) – Service description (service set 1)		
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F.853	11-1998	Supplementary services in the Universal Personal Telecommunication (UPT) environment		
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.Sup1	11-1988	Definitions relating to telegraph, telematic and data transmission services		
F.Sup2	11-1988	Terms and definitions for telex		
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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	03-2005	The E-model, a computational model for use in transmission planning	
G.108	09-1999	Application of the E-model: A planning guide	
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	
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.111	03-1993	Loudness ratings (LRs) in an international connection	
G.113	02-2001	Transmission impairments due to speech processing	
G.113 Appendix I	05-2002	Provisional planning values for the equipment impairment factor le and packet-loss robustness factor Bpl	
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	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	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.126	03-1993	Listener echo in telephone networks	
G.131	11-2003	Talker echo and its control	
G.136	09-1999	Application rules for Automatic Level Control Devices	
G.136 Erratum 1	12-2000		

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G.142	12-1998	Transmission characteristics of exchanges
G.161	06-2004	Interaction aspects of signal processing network equipment
G.164	11-1988	Echo suppressors
G.165	03-1993	Echo cancellers
G.168	08-2004	Digital network echo cancellers
G.169	07-1999	Automatic level control devices
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	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.192	03-1996	A common digital parallel interface for speech standardization activities
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.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
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	11-1988	Measuring methods for noise produced by modulating equipment and through-connection filters
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G.232	11-1988	12-channel terminal equipments

G.23	33 11-1988	Recommendations concerning translating equipments
G.24	11-1988	Pilots on groups, supergroups, etc.
G.24	11-1988	Through-connection of groups, supergroups, etc.
G.24	11-1988	Protection of pilots and additional measuring frequencies at points where there is a through-connection
G.32	22 11-1988	General characteristics recommended for systems on symmetric pair cables
G.32	25 11-1988	General characteristics recommended for systems providing 12 telephone carrier circuits on a symmetric cable pair [(12 + 12) systems]
G.33	32 11-1988	12 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs
G.33	3 11-1988	60 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs
G.33	34 11-1988	18 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs
G.34	11 11-1988	1.3 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs
G.34	11-1988	4 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs
G.34	14 11-1988	6 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs
G.34	11-1988	12 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs
G.34	6 11-1988	18 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs
G.35	52 11-1988	Interconnection of coaxial carrier systems of different designs
G.41	1 11-1988	Use of radio-relay systems for international telephone circuits
G.42	11-1988	Methods of interconnection
G.42	2 11-1988	Interconnection at audio-frequencies
G.42	23 11-1988	Interconnection at the baseband frequencies of frequency-division multiplex radio-relay systems
G.43	31 11-1988	Hypothetical reference circuits for frequency-division multiplex radio-relay systems
G.44	1 11-1988	Permissible circuit noise on frequency-division multiplex radio-relay systems
G.44	2 11-1988	Radio-relay system design objectives for noise at the far end of a hypothetical reference circuit with reference to telegraphy transmission
G.45	51 11-1988	Use of radio links in international telephone circuits
G.60)1 11-1988	Terminology for cables
G.60	02 11-1988	Reliability and availability of analogue cable transmission systems and associated equipments
G.61	1 11-1988	Characteristics of symmetric cable pairs for analogue transmission
G.6′	2 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.6′	3 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.6′	4 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.62	21 11-1988	Characteristics of 0.7/2.9 mm coaxial cable pairs
G.62	22 11-1988	Characteristics of 1.2/4.4 mm coaxial cable pairs

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G.631	11-1988	Types of submarine cable to be used for systems with line frequencies of less than about 45 $\rm MHz$	
G.640	03-2006	Co-location longitudinally compatible interfaces for free space optical systems	Pre-published.
G.650.1	06-2004	Definitions and test methods for linear, deterministic attributes of single- mode fibre and cable	
G.650.2	01-2005	Definitions and test methods for statistical and non-linear related attributes of single-mode fibre and cable	
G.650.2 (2005) Erratum 1	10-2005		
G.651	02-1998	Characteristics of a 50/125 μm multimode graded index optical fibre cable	
G.652	06-2005	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	06-2004	Characteristics of a cut-off shifted single-mode optical fibre and cable	
G.655	03-2006	Characteristics of a non-zero dispersion-shifted single-mode optical fibre and cable	Pre-published.
G.656	06-2004	Characteristics of a fibre and cable with non-zero dispersion for wideband optical transport	
G.661	03-2006	Definition and test methods for the relevant generic parameters of optical amplifier devices and subsystems	Pre-published.
G.662	07-2005	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	Amendements to Appendix II	
G.664	03-2006	Optical safety procedures and requirements for optical transport systems	Pre-published.
G.665	01-2005	Generic characteristics of Raman amplifiers and Raman amplified subsystems	
G.666	07-2005	Characteristics of PMD compensators and PMD compensating receivers	
G.671	01-2005	Transmission characteristics of optical components and subsystems	
G.671 (2005) Amendment 1	03-2006		Pre-published.
G.691	03-2006	Optical interfaces for single channel STM-64 and other SDH systems with optical amplifiers	Pre-published.
G.692	10-1998	Optical interfaces for multichannel systems with optical amplifiers	
G.692 (1998) Corrigendum 1	01-2000		
G.692 (1998) Corrigendum 2	06-2002		
G.692 (1998) Amendment 1	01-2005		
G.693	01-2005	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	01-2005	Optical interfaces for coarse wavelength division multiplexing applications	

G.695 (2005) Erratum 1	06-2005	
G.696.1	07-2005	Longitudinally compatible intra-domain DWDM applications
G.696.1 (2005) Erratum 1	03-2006	
G.697	06-2004	Optical monitoring for DWDM systems
G.698.1	06-2005	Multichannel DWDM applications with single-channel optical interfaces
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.703 (2001) Erratum 1	07-2005	
G.704	10-1998	Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels
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)
G.707/Y.1322 (2003) Corrigendum 1	06-2004	
G.707/Y.1322 Amendment 1	08-2004	
G.707/Y.1322 (2003) Corrigendum 2	08-2005	
G.707 (2003) Corrigendum 2 Erratum 1	02-2006	
G.708	07-1999	Sub STM-0 network node interface for the synchronous digital hierarchy (SDH)
G.709/Y.1331	03-2003	Interfaces for the Optical Transport Network (OTN)
G.711	11-1988	Pulse code modulation (PCM) of voice frequencies
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.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
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
G.722.1	05-2005	Low-complexity coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss
G.722.2	07-2003	Wideband coding of speech at around 16 kbit/s using Adaptive Multi-Rate Wideband (AMR-WB)
G.722.2 (2003) Erratum 1	06-2004	
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 C (2004) Erratum 1	06-2004	
G.722.2 Annex D	07-2003	Digital test sequences
G.722.2 Annex E	01-2002	Frame structure
G.722.2 Annex E (2002) Corrigendum 1	07-2003	
G.722.2 Annex F	11-2002	AMR-WB usage in H.245
G.722.2 Appendix I	01-2002	Error concealment of erroneous or lost frames
G.722.2 Appendix I (2002) Amendment 1	07-2003	
G.723.1	03-1996	Dual rate speech coder for multimedia communications transmitting at 5.3 and 6.3 kbit/s
G.723.1 Annex A	11-1996	Silence compression scheme
G.723.1 Annex B	11-1996	Alternative specification based on floating point arithmetic
G.723.1 Annex C	11-1996	Scalable channel coding scheme for wireless applications
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)
G.726 (1990) Corrigendum 1	05-2005	Correction to Annex A: Extensions of Recommendation G.726 for use with uniform-quantized input and output
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 III	05-1994	Comparison of ADPCM algorithms
G.727	12-1990	5-, 4-, 3- and 2-bit/sample embedded adaptive differential pulse code

G.727 (1990) Corrigendum 1	05-2005	Correction to Annex A: Extensions of Recommendation G.727 for use with uniform-quantized input and output
G.727 Annex A	11-1994	Extensions of Recommendation G.727 for use with uniform-quantized input and output
G.727 Appendix II	05-1994	Comparison of ADPCM algorithms
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
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
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
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)
G.729 Annex A	11-1996	Reduced complexity 8 kbit/s CS-ACELP speech codec
G.729 Annex B (1996) Corrigendum 2	02-2000	
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G.729 Annex C	09-1998	Reference floating-point implementation for G.729 CS-ACELP 8 kbit/s speech coding
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G.743	11-1988	Second order digital multiplex equipment operating at 6312 kbit/s and using positive justification
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H.221	03-2004	Frame structure for a 64 to 1920 kbit/s channel in audiovisual teleservices	
H.221 (2004) Amendment 1	09-2005	Support for 14 kHz audio bandwidth extension of G.722.1 Annex C in H.221	
H.222.0	02-2000	Information technology – Generic coding of moving pictures and associated audio information: Systems	
H.222.0 (2000) Fechnical Cor.1	03-2001		
H.222.0 (2000) Fechnical 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	
H.222.0 Amendment 2	06-2003	Support of IPMP on MPEG-2 systems	
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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	
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H.222.0 (2000) Amendment 4	01-2005	ISAN and V-ISAN use in the content labelling descriptor	
H.222.0 (2000) Amendment 5	01-2005	New audio profile and level signalling and change to audio_type table entry	
H.222.0 (2000) Corrigendum 4	09-2005		
H.222.1	03-1996	Multimedia multiplex and synchronization for audiovisual communication in ATM environments	
⊣.223	07-2001	Multiplexing protocol for low bit rate multimedia communication	
H.224	01-2005	A real time control protocol for simplex applications using the H.221 LSD/HSD/MLP channels	
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H.226	09-1998	Channel aggregation protocol for multilink operation on circuit-switched networks	
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	H.230 (2004) Amendment 1	10-2005	Support of Unicode in H.320 systems and new Annex A for H.230 generic capabilities and messages in H.245	
	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.235.0	09-2005	H.323 security: Framework for security in H-series (H.323 and other H.245-based) multimedia systems	
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	H.235.2	09-2005	H.323 security: Signature security profile	
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	H.235.8	09-2005	H.323 security: Key exchange for SRTP using secure signalling channels	
	H.239	09-2005	Role management and additional media channels for H.300-series terminals	
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	H.241	09-2005	Extended video procedures and control signals for H.300-series terminals	
	H.242	03-2004	System for establishing communication between audiovisual terminals using digital channels up to 2 Mbit/s	
	H.242 (2004) Amendment 1	09-2005	Support for 14 kHz audio bandwidth extension of G.722.1 Annex C in H.242	
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	H.244	07-1995	Synchronized aggregation of multiple 64 or 56 kbit/s channels	
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	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 (1998) Amendment 1	09-2005	Usage of H.243 multipoint control messages and support for Unicode characters in H.320 systems	
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	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	09-2005	Gateway control protocol: Version 3	Pre-published.
	H.248.2	01-2005	Gateway control protocol: Facsimile, text conversation and call discrimination packages	

H.248.3	11-2000	Gateway control protocol: User interface elements and actions packages
H.248.3 (2000) Corrigendum 1	03-2004	
H.248.4	11-2000	Gateway control protocol: Transport over Stream Control Transmission Protocol (SCTP)
H.248.4 (2000) Corrigendum 1	03-2004	
H.248.5	11-2000	Gateway control protocol: Transport over ATM
H.248.6	11-2000	Gateway control protocol: Dynamic Tone Definition package
H.248.7	03-2004	Gateway control protocol: Generic Announcement package
H.248.8	09-2005	Gateway control protocol: Error code and service change reason description
H.248.9	01-2005	Gateway control protocol: Advanced media server packages
H.248.10	07-2001	Gateway control protocol: Media gateway resource congestion handling package
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
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
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H.248.15	03-2002	Gateway control protocol: SDP H.248 package attribute
H.248.16	11-2002	Gateway control protocol: Enhanced digit collection packages and procedures
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H.248.17	11-2002	Gateway control protocol: Line test packages
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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
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
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H.248.23	01-2005	Gateway control protocol: Enhanced Alerting packages
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
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H.248.26	01-2005	Gateway control protocol: Enhanced analogue lines packages	
H.248.27	07-2003	Gateway control protocol: Supplemental tones packages	
H.248.28	03-2004	Gateway control protocol: International CAS packages	
H.248.29	01-2005	Gateway control protocol: International CAS compelled register signalling 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	
H.248.32	01-2005	Gateway control protocol: Detailed congestion reporting package	
H.248.33	01-2005	Gateway control protocol: PCM frame spare bit package	
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H.248.37	09-2005	Gateway control protocol: IP NAPT traversal package	
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	
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H.263	01-2005	Video coding for low bit rate communication	
H.263 Appendix III	06-2001	Examples for H.263 encoder/decoder implementations	
H.264	03-2005	Advanced video coding for generic audiovisual services	
H.264.1	03-2005	Conformance specification for H.264 advanced video coding	
H.264.1 (2005) Corrigendum 1	09-2005		Pre-published.
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.310	09-1998	Broadband audiovisual communication systems and terminals	
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H.321	02-1998	Adaptation of H.320 visual telephone terminals to B-ISDN environments	
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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
H.323 (2003) Amendment 1	01-2005	Revised Annex D – Real-time facsimile over H.323 systems: Transport of facsimile signals using RTP
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H.324	09-2005	Terminal for low bit-rate multimedia communication
H.331	03-1993	Broadcasting type audiovisual multipoint systems and terminal equipment
H.332	09-1998	H.323 extended for loosely coupled conferences
H.350.4	08-2003	Directory services architecture for SIP
H.350.6	03-2004	Directory services architecture for call forwarding and preferences
H.360	03-2004	An architecture for end-to-end QoS control and signalling
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
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H.450.6	05-1999	Call waiting supplementary service for H.323
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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
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H.530	03-2002	Symmetric security procedures for H.323 mobility in H.510
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H.610	07-2003	Full service VDSL – System architecture and customer premises equipment
H.611	07-2003	Full-Service VDSL – Operations, Administration Maintenance & Provision aspects
H.Sup1	05-1999	Application profile – Sign language and lip-reading real-time conversation using low bit rate video communication
H.Sup3	05-2003	Operator requirements for full-service VDSL in ITU-T Recommendations H.610 and H.611

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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	03-1993	Integrated services digital networks (ISDNs)	
I.120	04-1991	Broadband aspects of ISDN	
1.122	03-1993	Framework for frame mode bearer services	
I.130	11-1988	Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN	
l.140	03-1993	Attribute technique for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN	
l.141	11-1988	ISDN network charging capabilities attributes	
I.150	02-1999	B-ISDN asynchronous transfer mode functional characteristics	
1.200	11-1988	Guidance to the I.200-series of Recommendations	
I.210	03-1993	Principles of telecommunication services supported by an ISDN and the means to describe them	
.211	03-1993	B-ISDN service aspects	
.220	11-1988	Common dynamic description of basic telecommunication services	
.221	03-1993	Common specific characteristics of services	
.230	11-1988	Definition of bearer service categories	
l.231.1	11-1988	Circuit-mode 64 kbit/s unrestricted, 8 kHz structured bearer service	
.231.2	11-1988	Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for speech information transfer	
1.231.3	11-1988	Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for 3.1 kHz audio information transfer	
1.231.4	11-1988	Circuit-mode, alternate speech / 64 kbit/s unrestricted, 8 kHz structured bearer service	
1.231.5	11-1988	Circuit-mode 2 x 64 kbit/s unrestricted, 8 kHz structured bearer service	
1.231.6	07-1996	Circuit-mode 384 kbit/s unrestricted, 8 kHz structured bearer service	
1.231.7	07-1996	Circuit-mode 1536 kbit/s unrestricted, 8 kHz structured bearer service	
.231.8	07-1996	Circuit-mode 1920 kbit/s unrestricted, 8 kHz structured bearer service	
.231.9	03-1993	Circuit-mode 64 kbit/s 8 kHz structured multi-use bearer service	
.231.10	08-1992	Circuit-mode multiple-rate unrestricted 8 kHz structured bearer service	
.232.1	11-1988	Virtual call and permanent virtual circuit bearer service category	
1.232.3	03-1993	User signalling bearer service category (USBS)	
1.233.1	10-1991	ISDN frame relaying bearer service	

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I.233.1 Annex F	07-1996	Frame relay multicast	
1.233.2	10-1991	ISDN frame switching bearer service	
1.240	11-1988	Definition of teleservices	
I.241.1	11-1988	Telephony	
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1.250	11-1988	Definition of supplementary services	
I.251.1	08-1992	Direct-dialling-In	Available only in PDF.
l.251.2	08-1992	Multiple Subscriber Number	
l.251.3	08-1992	Calling Line Identification Presentation	
I.251.4	08-1992	Calling Line Identification Restriction	
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1.252.1	11-1988	Call Transfer	
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1.255.2	07-1996	Support of Private Numbering Plans
1.255.3	07-1990	Multi-level precedence and preemption service (MLPP)
1.255.4	07-1990	Priority service
1.255.5	08-1992	Outgoing call barring
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)
1.256.3	08-1992	Reverse charging
1.257.1	10-1995	User-to-User Signalling (UUS)
1.258.1	10-1995	Terminal portability (TP)
1.258.2	02-1995	In-call modification (IM)
1.259.1	07-1996	Address screening (ADS)
I.310	03-1993	ISDN – Network functional principles
I.311	08-1996	B-ISDN general network aspects
I.311 (1996) Amendment 1	03-2000	
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1.320	11-1993	ISDN protocol reference model
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1.322	02-1999	Generic protocol reference model for telecommunication networks
1.324	10-1991	ISDN network architecture
1.325	03-1993	Reference configurations for ISDN connection types
1.326	03-2003	Functional architecture of transport networks based on ATM
1.327	03-1993	B-ISDN functional architecture
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1.330	11-1988	ISDN numbering and addressing principles
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E.164 Supplement 3	05-2004	Operational and administrative issues associated with national implementations of the ENUM functions
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1.333	03-1993	Terminal selection in ISDN
1.334	11-1988	Principles relating ISDN numbers/sub-addresses to the OSI reference model network layer addresses
1.340	11-1988	ISDN connection types
1.350	03-1993	General aspects of quality of service and network performance in digital networks, including ISDNs
G.820/I.351/Y.15 01	07-2004	Relationships among ISDN, IP-based network and physical layer performance Recommendations
1.352	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
1.354	03-1993	Network performance objectives for packet-mode communication in an ISDN
1.355	10-2000	ISDN 64 kbit/s connection type availability performance
1.356	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
1.357	11-2000	B-ISDN semi-permanent connection availability
1.358	09-2003	Call processing performance for switched virtual channel connections (VCCs) in a B-ISDN
1.359	02-1999	Accuracy and dependability of ISDN 64 kbit/s circuit-mode connection types
l.361	02-1999	B-ISDN ATM layer specification
I.363.1	08-1996	Type 1 AAL
1.363.2	11-2000	Type 2 AAL
1.363.3	08-1996	Type 3/4 AAL
1.363.5	08-1996	Type 5 AAL
1.364	02-1999	Support of the broadband connectionless data bearer service by the B-ISDN
I.365.1	11-1993	Frame relaying service specific convergence sublayer (FR-SSCS)
1.365.2	11-1995	Service-specific coordination function to provide the connection-oriented network service
1.365.3	11-1995	Service-specific coordination function to provide the connection-oriented transport service
1.365.4	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
1.366.2	11-2000	AAL type 2 service specific convergence sublayer for narrow-band services
I.366.2 (2000) Corrigendum 1	03-2002	
l.370	10-1991	Congestion management for the ISDN frame relaying bearer service
l.371	03-2004	Traffic control and congestion control in B-ISDN
1.372	03-1993	Frame relaying bearer service network-to-network interface requirements

1.373	03-1993	Network capabilities to support universal personal telecommunication (UPT)
1.375.1	06-1998	General aspects
1.375.2	06-1998	Example of multimedia retrieval service class – Video-on-demand service using an ATM-based network
1.375.3	03-2000	Example of multimedia distribution service class – Switched digital broadcasting
1.376	03-1995	ISDN network capabilities for the support of the teleaction service
1.377	10-2000	Network requirements to support charging and accounting in B-ISDN
1.378	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
l.381	03-2001	ATM adaptation layer (AAL) Performance
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
l.414	09-1997	Overview of Recommendations on layer 1 for ISDN and B-ISDN customer accesses
1.420	11-1988	Basic user-network interface
l.421	11-1988	Primary rate user-network interface
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	
1.432.1	02-1999	General characteristics
1.432.2	02-1999	155 520 kbit/s and 622 080 kbit/s operation
1.432.3	02-1999	1544 kbit/s and 2048 kbit/s operation
1.432.4	02-1999	51 840 kbit/s operation
1.432.5	06-1997	25 600 kbit/s operation
Q.920	03-1993	ISDN user-network interface data link layer – General aspects
Q.920 (1993) Amendment 1	06-2000	
Q.921	09-1997	ISDN user-network interface – Data link layer specification
Q.921 (1997) Amendment 1	06-2000	
Q.930	03-1993	ISDN user-network interface layer 3 – General aspects
Q.931	05-1998	ISDN user-network interface layer 3 specification for basic call control
Q.931 (1998) Amendment 1	12-2002	Extensions for the support of digital multiplexing equipment

Q.931 (1998) Erratum 1	02-2003	
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)
X.31	11-1995	Support of packet mode terminal equipment by an ISDN
V.110	02-2000	Support by an ISDN of data terminal equipments with V-series type interfaces
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
V.120 (1996) Corrigendum 1	05-1999	
1.470	11-1988	Relationship of terminal functions to ISDN
I.480	03-2000	1+1 protection switching for cell-based physical layer
1.500	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
l.511	11-1988	ISDN-to-ISDN layer 1 internetwork interface
l.515	03-1993	Parameter exchange for ISDN interworking
1.520	03-1993	General arrangements for network interworking between ISDNs
1.525	08-1996	Interworking between networks operating at bit rates less than 64 kbit/s with 64 kbit/s-based ISDN and B-ISDN
1.530	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
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
1.555	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
1.570	03-1993	Public/private ISDN interworking
l.571	08-1996	Connection of VSAT based private networks to the public ISDN
1.572	03-2000	VSAT interconnection with the PSTN
1.580	11-1995	General arrangements for interworking between B-ISDN and 64 kbit/s based ISDN
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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.630	02-1999	ATM protection switching
I.630 (1999) Corrigendum 1	03-2000	
I.630 (1999) Amendment 1	03-2000	
I.731	10-2000	Types and general characteristics of ATM equipment
1.732	10-2000	Functional characteristics of ATM equipment
I.741	07-1999	Interworking and interconnection between ATM and switched telephone networks for the transmission of speech, voiceband data and audio signals
l.751	03-1996	Asynchronous transfer mode management of the network element view
I.761	03-2000	Inverse multiplexing for ATM (IMA)
1.762	03-2000	ATM over fractional physical links
I.Sup1	03-1998	Generic service descriptions for ten supplementary services defined in I.250-Series Recommendations

Recommendation count: 386

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

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Number	Approval Date	Recommendation Title	Status
J.2	09-1999	Guidelines on the use of some ITU-T Recommendations in the J series	
J.11	11-1988	Hypothetical reference circuits for sound-programme transmissions	
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	
J.21	08-1994	Performance characteristics of 15 kHz-type sound-programme circuits – Circuits for high quality monophonic and stereophonic transmissions	
J.23	11-1988	Performance characteristics of 7 kHz type (narrow bandwidth) sound- programme circuits	
J.24	02-1982	Modulation of signals carried by sound-programme circuits by interfering signals from power supply sources	
J.25	05-1986	Estimation of transmission performance of sound-programme circuits shorter or longer than the hypothetical reference circuit	
J.26	06-1990	Test signals to be used on international sound-programme connections	
J.27	06-1990	Signals for the alignment of international sound-programme connections	
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.51	08-1994	General principles and user requirements for the digital transmission of high quality sound programmes	
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	
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	
J.57	06-1990	Transmission of digital studio quality sound signals over H1 channels	

J.61	06-1990	Transmission performance of television circuits designed for use in international connections	Available only in PDF.
J.62	02-1978	Single value of the signal-to-noise ratio for all television systems	
J.63	06-1990	Insertion of test signals in the field-blanking interval of monochrome and colour television signals	
J.64	02-1986	Definitions of parameters for simplified automatic measurement of television insertion test signals	
J.65	02-1978	Standard test signal for conventional loading of a television channel	
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	
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	
J.80	09-1993	Transmission of component-coded digital television signals for contribution-quality applications at bit rates near 140 Mbit/s	
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	
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	
J.83 (1997) Erratum 1	07-1998		
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	
J.86	06-1990	Mixed analogue-and-digital transmission of analogue composite television signals over long distances	
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	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	06-1990	Tolerances for transmission time differences between the vision and sound components of a television signal	
J.101	06-1990	Measurement methods and test procedures for teletext signals	
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	
J.112	03-1998	Transmission systems for interactive cable television services	
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	
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.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	
J.125	04-2004	Link privacy for cable modem implementations	
J.126	04-2004	Embedded Cable Modem device specification	
J.127	06-2004	Transmission protocol for multimedia webcasting over TCP/IP networks	
J.128	11-2005	Set-top Gateway specification for transmission systems for interactive cable television services	Pre-published.
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	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	03-1998	Operational functionalities for the delivery of digital multiprogramme television, sound and data services through multichannel, multipoint distribution systems (MMDS)	
J.150 (1998) Amendment 1	09-1999	Additions to Recommendation J.150 to also encompass local multipoint distribution systems (LMDS)	
J.150 (1998) Amendment 2	03-2001		
J.151	10-2000	RF remodulator interface for digital television	
J.160	11-2005	Architectural framework for the delivery of time-critical services over	
		cable television networks using cable modems	Pre-published.
J.161	03-2001		Pre-published.
J.161 J.162		cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service	Pre-published.
	03-2001	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services	·
J.162	03-2001 11-2005	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over	·
J.162 J.163	03-2001 11-2005 11-2005	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over	Pre-published.
J.162 J.163 J.164	03-2001 11-2005 11-2005 11-2005	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over cable television networks using cable modems	Pre-published.
J.162 J.163 J.164 J.165	03-2001 11-2005 11-2005 11-2005 05-2003	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over cable television networks using cable modems IPCablecom Internet signalling transport protocol (ISTP)	Pre-published.
J.162 J.163 J.164 J.165 J.166	03-2001 11-2005 11-2005 11-2005 05-2003 11-2005	 cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over cable television networks using cable modems IPCablecom Internet signalling transport protocol (ISTP) IPCablecom Management Information Base (MIB) framework Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable television networks using cable television protocol (ISTP) 	Pre-published. Pre-published.
J.162 J.163 J.164 J.165 J.166 J.167	03-2001 11-2005 11-2005 11-2005 05-2003 11-2005 11-2005	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over cable television networks using cable modems IPCablecom Internet signalling transport protocol (ISTP) IPCablecom Management Information Base (MIB) framework Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable	Pre-published. Pre-published. Pre-published.
J.162 J.163 J.164 J.165 J.166 J.167 J.170	03-2001 11-2005 11-2005 05-2003 11-2005 11-2005 11-2005	cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over cable television networks using cable modems IPCablecom Internet signalling transport protocol (ISTP) IPCablecom Management Information Base (MIB) framework Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable modems IPCablecom security specification	Pre-published. Pre-published. Pre-published.
J.162 J.163 J.164 J.165 J.166 J.167 J.170 J.171.0	03-2001 11-2005 11-2005 11-2005 05-2003 11-2005 11-2005 11-2005	 cable television networks using cable modems Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems Network call signalling protocol for the delivery of time-critical services over cable television networks using cable modems Dynamic quality of service for the provision of real-time services over cable television networks using cable modems Event message requirements for the support of real-time services over cable television networks using cable modems IPCablecom Internet signalling transport protocol (ISTP) IPCablecom Management Information Base (MIB) framework Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable television networks using cable television networks using cable television networks using cable television protocol (ISTP) IPCablecom Management Information Base (MIB) framework Media terminal adapter (MTA) device provisioning requirements for the delivery of real-time services over cable television networks using cable modems IPCablecom security specification IPCablecom trunking gateway control protocol (TGCP): Profiles overview 	Pre-published. Pre-published. Pre-published.

J.173	11-2005	IPCablecom embedded MTA primary line support	
J.175	11-2005	Audio server protocol	Pre-published.
J.177	11-2005	IPCablecom CMS subscriber provisioning specification	Pre-published.
J.178	11-2005	IPCablecom CMS to CMS signalling	Pre-published.
J.179	11-2005	IPCablecom support for multimedia	Pre-published.
J.180	05-2000	User requirements for statistical multiplexing of several programmes on a transmission channel	
J.181	06-2004	Digital program insertion cueing message for cable television systems	
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	07-2002	Architecture of MediaHomeNet that supports cable-based services	
J.191	03-2004	IP feature package to enhance cable modems	
J.192	11-2005	A residential gateway to support the delivery of cable data services	Pre-published.
J.193	06-2004	Requirements for the next generation of set-top-boxes	
J.197	11-2005	High level requirements for a Digital Rights Management (DRM) bridge from a cable access network to a home network	Pre-published.
J.200	03-2001	Worldwide common core – Application environment for digital interactive television services	
J.200 (2001) Corrigendum 1	05-2004		
J.201	07-2004	Harmonization of declarative content format for interactive television applications	
J.201 (2004) Amendment 1	03-2005	Additional media types	
J.202	11-2005	Harmonization of procedural content formats for interactive TV applications	Pre-published.
J.240	06-2004	Framework for remote monitoring of transmitted picture signal-to-noise ratio using spread-spectrum and orthogonal transform	
J.241	04-2005	Quality of service ranking and measurement methods for digital video services delivered over broadband IP networks	

J.260	01-2005	Requirements for preferential telecommunications over IPCablecom networks	
J.281	03-2005	Requirements for multichannel video signal transmission over IP-based fibre network	
J.600	06-2004	Transport of Large Screen Digital Imagery (LSDI) applications that employ MPEG-2 encoded HDTV signals	
J.601	11-2005	Transport of Large Screen Display Imagerie (LSDI) applications for its expanded hierarchy	Pre-published.
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	
Recommendati	ion count: 22	2	

Series K : Protection against interference

C6 11-1988 Precautions at crossings C47 11-1988 Protection against acoustic shock C58 11-1988 Separation in the soil between telecommunication cables and earthing system of power facilities C59 11-1988 Protection of telecommunication staff and plant against a large earth potential due to a neighbouring electric traction line C40 10-1996 Low frequency interference due to unbalance about earth of telecommunication gainst overvoltages and overcurrents C41 10-1993 Principles of protection against overvoltages and overcurrents C412 02-2006 Characteristics of gas discharge tubes for the protection of telecommunications installations C414 11-1988 Induced voltages in cables with plastic-insulated conductors C414 11-1988 Calculation of voltage induced into telecommunication lines from radio station broadcasts and methods of reducing interference C418 11-1988 Calculation of voltage induced into telecommunication and power cables C420 07-2003 Resistibility of telecommunication equipment installed in a telecommunication scente to overvoltages and overcurrents C420 11-2004 Correction to table 7K-20 C421 12-2003 Resistibility of telecommunication equipment installed in customer premises to overvoltage and overcu	Number	Approval Date	Recommendation Title	Status
C6 11-1988 Precautions at crossings C47 11-1988 Protection against acoustic shock C48 11-1988 Separation in the soil between telecommunication cables and earthing system of power facilities C49 11-1988 Protection of telecommunication staff and plant against a large earth potential due to a neighbouring electric traction line C40 10-1996 Low frequency interference due to unbalance about earth of telecommunication equipment C41 10-1998 Principles of protection against overvoltages and overcurrents C42 02-2006 Characteristics of gas discharge tubes for the protection of telecommunication installations C41 11-1988 Induced voltages in cables with plastic-insulated conductors C414 11-1988 Provision of a metallic screen in plastic-sheathed cables C418 11-1988 Calculation of voltage induced into telecommunication and power cables C419 11-1988 Joint use of trenches and tunnels for telecommunication and power cables C420 07-2003 Resistibility of telecommunication equipment installed in a telecommunication to table 7/K.20 C420 07-2003 Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents C421 07-2004	K.5	11-1988	Joint use of poles for electricity distribution and for telecommunications	
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K.50	02-2000	Safe limits of operating voltages and currents for telecommunication systems powered over the network
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K.53	02-2000	Values of induced voltages on telecommunication installations to establish telecom and a.c. power and railway operators responsibilities
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K.68	02-2006	Management of electromagnetic interference on telecommunication systems due to power systems	Pre-published.

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

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Number	Approval Date	Recommendation Title	Status
L.1	11-1988	Construction, installation and protection of telecommunication cables in public networks	
L.2	11-1988	Impregnation of wooden poles	
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L.7	11-1988	Application of joint cathodic protection	
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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	
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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 marinized terrestrial cables	

L.29	01-2002	As-laid report and maintenance/repair log for marinized terrestrial cable installation	
L.30	10-1996	Markers on marinized 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	
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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	
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L.50	11-2003	Requirements for passive optical nodes: Optical distribution frames for central office environments	
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L.52	05-2003	Deployment of Passive Optical Networks (PON)	
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L.62	09-2004	Practical aspects of unbundling services by multiple operators in copper access networks	
L.63	10-2004	Safety procedures for outdoor installations	Pre-published.
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Series M : TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits

Number	Approval Date	Recommendation Title	Status
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.60	03-1993	Maintenance terminology and definitions	
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M.80	11-1988	Control stations	
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M.100	11-1988	Service circuits	
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M.120	11-1988	Access points for maintenance	
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M.160	11-1988	Stability of transmission	
M.320	11-1988	Numbering of the channels in a group	
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M.340	11-1988	Numbering of supergroups within a mastergroup	
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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
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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	11-1988	International telephone circuits – Principles, definitions and relative transmission levels
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M.620	11-1988	Methods for carrying out routine measurements on circuits
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M.729	11-1988	Organization of the maintenance of international public switched telephone circuits used for data transmission
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M.760	11-1988	Transfer link for common channel Signalling System No. 6
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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	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) Corrigendum 1	08-2001		Available only ir 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	01-2004	Designations for interconnections among operators' networks	
M.1401	05-2005	Formalization of interconnection designations among operators' telecommunication networks	
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.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	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.3010 (2000) Amendment 2	11-2005	Additions and corrections
M.3013	02-2000	Considerations for a telecommunications management network
M.3016.0	05-2005	Security for the management plane: Overview
M.3016.1	04-2005	Security for the management plane: Security requirements
M.3016.1 (2005) Corrigendum 1	11-2005	
M.3016.2	04-2005	Security for the management plane: Security services
M.3016.3	04-2005	Security for the management plane: Security mechanism

M.3016.4	04-2005	Security for the management plane: Profile proforma	
M.3017	06-2003	Framework for the integrated management of hybrid circuit/packet networks	
M.3017 (2003) Amendment 1	04-2005	Additional options	
M.3020	02-2000	TMN Interface Specification Methodology	
M.3030	08-2002	Telecommunications Markup Language (tML) framework	
M.3031	07-2004	Guidelines for Implementation Conformance Statement proformas for tML schemas	
M.3031 (2004) Corrigendum 1	11-2005		
M.3050.0	07-2004	Enhanced Telecom Operations Map (eTOM) – Introduction	
M.3050.1	06-2004	Enhanced Telecom Operations Map (eTOM) – The business process framework	
M.3050.2	06-2004	Enhanced Telecom Operations Map (eTOM) – Process decompositions and descriptions	
M.3050.3	06-2004	Enhanced Telecom Operations Map (eTOM) – Representative process flows	
M.3050.4	06-2004	Enhanced Telecom Operations Map (eTOM) – B2B integration: Using B2B inter-enterprise integration with the eTOM	
M.3050 Supplement 1	05-2004	Enhanced Telecom Operations Map (eTOM) – ITIL application note	
M.3050 Supplement 2	05-2004	Enhanced Telecom Operations Map (eTOM) – Public B2B Business Operations Map (BOM)	
M.3050 Supplement 3	05-2004	Enhanced Telecom Operations Map (eTOM) – eTOM to M.3400 mapping	
M.3060/Y.2401	03-2006	Principles for the Management of the Next Generation Networks Pre-publishe	əd.
M.3100	04-2005	Generic network information model	
M.3101	07-1995	Managed object conformance statements for the generic network information model	
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 (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	
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
M.3350	05-2004	TMN service management requirements for information interchange across the TMN X-interface to support provisioning of Emergency Telecommunication Service (ETS)
M.3400	02-2000	TMN management functions
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.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

Recommendation count: 371

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

Number	Approval Date	Recommendation Title	Status
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.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	

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Series O : Specifications of measuring equipment

Number	Approval Date	Recommendation Title	Status
D.1	02-2000	Scope and application of measurement equipment specifications covered in the O-series Recommendations	
D.3	10-1992	Climatic conditions and relevant tests for measuring equipment	
D.6	11-1988	1020 Hz reference test frequency	
D.9	03-1999	Measuring arrangements to assess the degree of unbalance about earth	
D.11	10-1992	Maintenance access lines	
0.22	10-1992	CCITT automatic transmission measuring and signalling testing equipment ATME No. 2	
D.27	11-1988	In-station echo canceller test equipment	
D.33	07-1995	Automatic equipment for rapidly measuring stereophonic pairs and monophonic sound-programme circuits, links and connections	
D.41	10-1994	Psophometer for use on telephone-type circuits	
D.42	11-1988	Equipment to measure non-linear distortion using the 4-tone intermodulation method	
D.61	11-1988	Simple equipment to measure interruptions on telephone-type circuits	
0.62	11-1988	Sophisticated equipment to measure interruptions on telephone-type circuits	
).71	11-1988	Impulsive noise measuring equipment for telephone-type circuits	
D.81	11-1988	Group-delay measuring equipment for telephone-type circuits	
0.81 Appendix I	06-1998	A measuring signal (multitone test signal) for fast measurement of amplitude and phase for telephone type circuits	
D.81 Appendix I Erratum1	06-2000		
0.82	11-1988	Group-delay measuring equipment for the range 5 to 600 kHz	
).91	11-1988	Phase jitter measuring equipment for telephone-type circuits	
0.95	11-1988	Phase and amplitude hit counters for telephone-type circuits	
0.111	11-1988	Frequency shift measuring equipment for use on carrier channels	
D.131	11-1988	Quantizing distortion measuring equipment using a pseudo-random noise test signal	
0.132	11-1988	Quantizing distortion measuring equipment using a sinusoidal test signal	
D.133	03-1993	Equipment for measuring the performance of PCM encoders and decoders	
D.150	05-1996	General requirements for instrumentation for performance measurements on digital transmission equipment	
0.150 (1996) Corrigendum 1	05-2002		
D.151	10-1992	Error performance measuring equipment operating at the primary rate and above	
D.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)	
0.172	04-2005	Jitter and wander measuring equipment for digital systems which are based on the synchronous digital hierarchy (SDH)	
O.172 (2005) Erratum 1	10-2005		
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.201	07-2003	Q-factor test equipment to estimate the transmission performance of optical channels	
0.211	01-2006	Test and measurement equipment to perform tests at the IP layer	Pre-published.
Recommendatio	on count: 70		

Series P : Specifications of measuring equipment

Number	Approval Date	Recommendation Title	Status
D 40	40,4000		
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.32	11-1988	Evaluation of the efficiency of telephone booths and acoustic hoods	
P.48	11-1988	Specification for an intermediate reference system	
P.50	09-1999	Artificial voices	
P.50 Erratum 1	05-2000		
P.50 Appendix I	02-1998	Test signals	
P.51	08-1996	Artificial mouth	
P.52	03-1993	Volume meters	
0.41	10-1994	Psophometer for use on telephone-type circuits	
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	
P.57	11-2005	Artificial ears	Pre-published.
P.58	08-1996	Head and torso simulator for telephonometry	
P.58 Erratum 1	01-2003		
P.59	03-1993	Artificial conversational speech	
P.61	11-1988	Methods for the calibration of condenser microphones	
P.64	09-1999	Determination of sensitivity/frequency characteristics of local telephone systems	
P.64 Erratum 1	05-2000		
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	
P.79 Erratum 1	05-2000		
P.79 (1999) Corrigendum 1	10-2000		
P.79 (1999) Corrigendum 2	02-2001		
P.79 (1999) Corrigendum 3	01-2005		

P.79 Annex G	11-2001	Wideband loudness rating algorithm	
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	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	06-2005	Transmission characteristics for wideband (150-7000 Hz) digital handset telephones	
P.313	05-2004	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	06-2005	Transmission characteristics for wideband (150-7000 Hz) digital hands- free telephony terminals	
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	
P.370	08-1996	Coupling hearing aids to telephone sets	
P.380	11-2003	Electro-acoustic measurements on headsets	
P.501 Erratum 1	09-2001		
P.501 (2000) Amendment 1	05-2004	New annexes A and B	
P.502	05-2000	Objective test methods for speech communication systems using complex test signals	
P.502 Erratum 1	07-2001		
P.505	11-2005	One-view visualization of speech quality measurement results Pro-	e-published.
P.561	07-2002	In-service non-intrusive measurement device – Voice service measurements	
P.562	05-2004	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	08-1996	Methods for subjective determination of transmission quality	
P.800.1	03-2003	Mean Opinion Score (MOS) terminology	
P.810	02-1996	Modulated noise reference unit (MNRU)	
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 (2002) Corrigendum 1	01-2005		
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	
P.851	11-2003	Subjective quality evaluation of telephone services based on spoken dialogue systems	
P.862 (2001) Amendment 2	11-2005	Revised Annex A – Reference implementations and conformance testing for Recommendations P.862, P.862.1 and P.862.2	Pre-published.
P.862.1	11-2003	Mapping function for transforming P.862 raw result scores to MOS-LQO	
P.862.2	11-2005	Wideband extension to Recommendation P.862 for the assessment of wideband telephone networks and speech codecs	Pre-published.
P.862.3	11-2005	Application guide for objective quality measurement based on Recommendations P.862, P.862.1 and P.862.2	Pre-published.
P.880	05-2004	Continuous evaluation of time-varying speech quality	
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.1010	07-2004	Fundamental voice transmission objectives for VoIP terminals and gateways	
P.supp10	11-1988	Considerations relating to transmission characteristics for analogue handset telephones	
P.supp16	11-1988	Guidelines for placement of microphones and loudspeakers in telephone conference rooms and for group audio terminals (GATs)	
P.supp20	03-1993	Examples of measurements of handset receive- frequency responses: dependence on earcap leakage losses	
P.Sup23	02-1998	ITU-T coded-speech database	
Recommendati	on count: 12	6	

Recommendation count: 126

Series Q : Integrated services digital network

Number	Approval Date	Recommendation Title	Status
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	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	
E.164	02-2005	The international public telecommunication numbering plan	
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	05-2004	Operational and administrative issues associated with national implementations of the ENUM functions	
E.164 Supplement 4	05-2004	Operational and administrative issues associated with the implementation of ENUM for non-geographic country codes	
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.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
E.180/Q.35	03-1998	Technical characteristics of tones for the telephone service
Q.44	11-1988	Attenuation distortion
Q.45	10-1984	Transmission characteristics of an analogue international exchange
Q.45bis	11-1988	
Q.48	11-1988	Demand assignment signalling systems
0.22	10-1992	CCITT automatic transmission measuring and signalling testing equipment ATME No. 2
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.65	06-2000	The unified functional methodology for the characterization of services and network capabilities including alternative object oriented techniques
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	11-1988	Introduction to stage 2 service descriptions for supplementary services
Q.81.1	11-1988	Direct dialling-in
Q.81.2	02-1992	Multiple subscriber number
Q.81.3	09-1991	Calling line identification presentation (CLIP) and calling line identification restriction (CLIR)
Q.81.5	09-1991	Connected line identification, presentation and restriction (COLP) and (COLR)
Q.81.7	06-1997	Malicious call identification (MCID)
Q.81.8	02-1992	Sub-addressing (SUB)
Q.82.2	03-1993	call forwarding
Q.82.3	03-1993	Call deflection
Q.82.4	11-1988	Line hunting
Q.82.7	07-1996	Explicit call transfer
Q.83.1	09-1991	Call waiting (CW)
Q.83.2	02-1992	Call hold

Q.83.3	11-1988	Completion of call to busy subscriber	Available only in PDF.
Q.84.1	03-1993	Conference calling (CONF)	
Q.84.2	10-1995	Three-party service	
Q.85.1	02-1992	Closed user group	
Q.85.3	02-1992	Multi-level precedence and preemption (MLPP)	
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.86.2	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.87.1	03-1993	User-to-user signalling (UUS)	
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	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.115.0	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	
Q.116	11-1988	Indication given to the outgoing operator or calling subscriber in case of an abnormal condition	
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.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	11-1988	Digital local, combined, transit and international exchanges – Introduction and field of application
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
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	44 4000	F lower to an a state	
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	
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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	
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R.30	11-1988	Transmission characteristic for international VFT links	
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R.35bis	11-1988	50-baud wideband VFT systems	
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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	
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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	
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R.54	03-1993	Conventional degree of distortion tolerable for standardized start-stop 50- baud systems
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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
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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	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	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	11-1988	Definitions of essential technical terms in the field of telegraph transmission
R.150	11-1988	Automatic protection switching of dual diversity bearers
Recommendatio	on count: 143	,

Series S : Telegraph services terminal equipment

Number	Approval Date	Recommendation Title	Status
C 1	02 4002	International Talegraph Alababat No. 2	
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.35	03-1993	international telex service 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	11-1988	Definitions of essential technical terms relating to apparatus for alphabetic telegraphy
S.supp1	11-1988	Minimal specifications for the bilingual (arabic/latin) teleprinter
Recommendati	on count: 63	

Series T : Terminals for telematic services

Number	Approval Date	Recommendation Title	Status
T 0	07.4000		
Т.0	07-1996	Classification of facsimile terminals for document transmission over the public networks	
T.1	11-1988	Standardization of phototelegraph apparatus	
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	
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	
T.22	03-1993	Standardized test charts for document facsimile transmissions	
T.23	04-1994	Standardized colour test chart for document facsimile transmissions	
T.24	06-1998	Standardized digitized image set	Available only in PDF.
T.30	09-2005	Procedures for document facsimile transmission in the general switched telephone network	
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	
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	Replacement of reference RFC 2531 by RFC 2879	
T.37 (1998) Amendment 3	11-2002	Support of image/tiff and image/tiff-fx MIME content-types	
T.38	09-2005	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	01-2005	Mixed Raster Content (MRC)
T.44 (2005) Erratum 1	06-2005	
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.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.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 (1992) Corrigendum 1	01-2004	Patent information update
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
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	
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)
T.87	06-1998	Information technology – Lossless and near-lossless compression of continuous-tone still images – Baseline
T.88	02-2000	Information technology – Lossy/lossless coding of bi-level images
T.88 (2000) Amendment 1	06-2003	Encoder
T.88 (2000) Amendment 2	06-2003	Extension of adaptive templates for halftone coding
T.88 Amendment 1 Erratum 1	12-2004	
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
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.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.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) Amendment 2	02-2000	
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.800 (2002) Amendment 1	09-2005	Profiles for digital cinema applications
T.801	08-2002	Information technology – JPEG 2000 image coding system: Extensions
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T.801 (2002) Amendment 2	05-2005	Extended capabilities marker segment
T.802	01-2005	Information technology – JPEG 2000 image coding system: Motion JPEG 2000
T.808	01-2005	Information technology – JPEG 2000 image coding system: Interactivity tools, APIs and protocols
T.851	09-2005	ITU-T T.81 (JPEG-1)-based still-image coding using an alternative arithmetic coder

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Series U : Telegraph switching

2 11-1988 Standardization of dials and dial pulse generators for the international telex service 3 11-1988 Arrangements in switching equipment to minimize the effects of false calling signals 4 11-1988 Exchange of information regarding signals destined to be used over international circuits concerned with switched teleprinter networks 5 11-1988 Requirements to be met by regenerative repeaters in international connections 6 11-1988 Prevention of fraudulent transit traffic in the fully automatic international telex service 7 03-1993 Numbering schemes for automatic switching networks 8 11-1988 Hypothetical reference connections for telex and gentex networks 10 03-1993 Equipment of an international telex position 11 03-1993 Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling) 12 03-1993 Telex and gentex signalling countactic resents according to Recommendations U.1, U.11 and U.12 20 11-1988 Telex and gentex signalling on radio channels (synchronous 7-unit systems affording error correction by automatic repetition) 21 11-1988 Telex and gentex signalling on radio channels (synchronous 7-unit synchronous system with automatic repetition) 22 11-1	Number	Approval Date	Recommendation Title	Status
2 11-1988 Standardization of dials and dial pulse generators for the international telex service 3 11-1988 Arrangements in switching equipment to minimize the effects of false calling signals 4 11-1988 Exchange of information regarding signals destined to be used over international international circuits concerned with switched teleprinter networks 5 11-1988 Requirements to be met by regenerative repeaters in international connections 6 11-1988 Prevention of fraudulent transit traffic in the fully automatic international telex service 7 03-1993 Numbering schemes for automatic switching networks 8 11-1988 Hypothetical reference connections for telex and gentex networks 10 03-1993 Equipment of an international telex position 11 03-1993 Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling) 12 03-1993 Terminal and transit control signalling systems according to Recommendations U.1, U.11 and U.12 20 11-1988 Signals indicating delay in transmission on calls set up by means of synchronous systems affording error correction by automatic repetition 21 11-988 Signals indicating delay in transmission on calls set up by means of synchronous multiplex equipment derive and gentex operation to be met by syn	J.1	03-1993	Signalling conditions to be applied in the international telev service	
3 11-1988 Arrangements in switching equipment to minimize the effects of false calling signals 4 11-1988 Exchange of information regarding signals destined to be used over international circuits concerned with switched teleprinter networks 5 11-1988 Requirements to be met by regenerative repeaters in international connections 6 11-1988 Prevention of fraudulent transit traffic in the fully automatic international telex service 7 03-1993 Numbering schemes for automatic switching networks 8 11-1988 Hypothetical reference connections for telex and gentex networks 10 03-1993 Equipment of an international telex position 11 03-1993 Trelex and gentex signalling on intercontinental circuits used for international circuits (type D signalling) 12 03-1993 Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling) 13 03-1993 Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12 20 11-1988 Operator recall on a telex call set up on a radiotelegraph circuit 21 11-1988 Operator recall on a telex call set up on a radiotelegraph circuit 22 11-1988 Requirements for telex and gentex operation to be met by	.2		Standardization of dials and dial pulse generators for the international	
4 11-1988 Exchange of information regarding signals destined to be used over international circuits concerned with switched teleprinter networks 5 11-1988 Requirements to be met by regenerative repeaters in international connections 6 11-1988 Prevention of fraudulent transit traffic in the fully automatic international telex service 7 03-1993 Numbering schemes for automatic switching networks 8 11-1988 Hypothetical reference connections for telex and gentex networks 10 03-1993 Equipment of an international telex position 11 03-1993 Telex and gentex signalling on intercontinental circuits used for internotrinental automatic transit traffic (type D signalling) 12 03-1993 Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling) 15 03-1993 Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12 20 11-1988 Telex and gentex signalling on radio channels (synchronous 7-unit synchronous systems with automatic repetition) 21 11-1988 Use of radiotelegraph circuit with ARQ equipment for fully automatic telex calls charged on the basis of elapsed time 22 11-1988 Signals indicating delay in transmission on calls set up by ode- and speced-dependent TDM systems co	.3	11-1988	Arrangements in switching equipment to minimize the effects of false	
5 11.1988 Requirements to be met by regenerative repeaters in international connections 6 11.1988 Prevention of fraudulent transit traffic in the fully automatic international telex service 7 03.1993 Numbering schemes for automatic switching networks 8 11.1988 Hypothetical reference connections for telex and gentex networks 10 03.1993 Equipment of an international telex position 11 03.1993 Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling) 12 03.1993 Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling) 15 03.1993 Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12 20 11.1988 Telex and gentex signalling on radio channels (synchronous 7-unit systems affording error correction by automatic repetition) 21 11.1988 Operator recall on a telex call set up on a radiotelegraph circuit 22 11.1988 Signals indicating delay in transmission on calls set up by means of synchronous systems with automatic repetition) 23 11.1988 Requirements for telex and gentex operation to be met by synchronous 24 11.1988 Requirements	4	11-1988	Exchange of information regarding signals destined to be used over	
telex service703-1993Numbering schemes for automatic switching networks811-1988Hypothetical reference connections for telex and gentex networks1003-1993Equipment of an international telex position1103-1993Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type C signalling)1203-1993Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling)1503-1993Interworking rules for international signalling system scoroding to Recommendations U.1, U.11 and U.122011-1988Operator recall on a telex call set up on a radiotelegraph circuit systems affording error correction by automatic repetition)2111-1988Operator recall on a telex call set up on a radiotelegraph circuit telex calls charged on the basis of elapsed time2211-1988Signals indicating delay in transmission on calls set up by means of synchronous systems with automatic error correction by repetition2311-1988Requirements for telex and gentex operation to be met by synchronous multiplex equipment described in Recommendation R.442511-1988Requirements for use in the international gentex network3111-1988Prevention of connection to faulty stations and/or station lines in the gentex service4003-1993Reactions by automatic connected to the telex network in the event of ineffective call attempts or signalling incidents4111-1988Follow-on calls4211-1988Follow-on calls	5	11-1988	Requirements to be met by regenerative repeaters in international	
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	.45	03-1993	Response to the not-ready condition of the telex terminal	
	46	03-1993		I

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	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	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.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	11-1988	Definitions of essential technical terms relating to telegraph switching and signalling
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
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
Recommendatio	on count: 97	

Number	Approval Date	Recommendation Title	Status
/.1	11-1988	Equivalence between binary notation symbols and the significant conditions of a two-condition code	
/.2	11-1988	Power levels for data transmission over telephone lines	
/.4	11-1988	General structure of signals of International Alphabet No. 5 code for character oriented data transmission over public telephone networks	
/.7	11-1988	Definitions of terms concerning data communication over the telephone network	
/.8	11-2000	Procedures for starting sessions of data transmission over the public switched telephone network	
/.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-t	
/.10	03-1993	Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates nominally up to 100 kbit/s	
/.11	10-1996	Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s	
/.12	08-1995	Electrical characteristics for balanced double-current interchange circuits for interfaces with data signalling rates up to 52 Mbit/s	
/.13	03-1993	Simulated carrier control	
/.14	03-1993	Transmission of start-stop characters over synchronous bearer channels	
/.14 (1993) Corrigendum 1	09-1998		
/.15	11-1988	Use of acoustic coupling for data transmission	
/.16	11-1988	Medical analogue data transmission modems	
/.17	02-1991	A 2-wire modem for facsimile applications with rates up to 14 400 bit/s	
/.17 (1991) Corrigendum 1	09-1998		
/.18	11-2000	Operational and interworking requirements for DCEs operating in the text telephone mode	
/.18 (2000) Amendment 1	11-2002	Harmonization with ANSI TIA/EIA-825 (2000) text phones	
/.19	11-1988	Modems for parallel data transmission using telephone signalling frequencies	
/.21	11-1988	300 bits per second duplex modem standardized for use in the general switched telephone network	
/.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	
/.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	
/.23	11-1988	600/1200-baud modem standardized for use in the general switched telephone network	
/.24	02-2000	List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)	

Series V : Data communication over the telephone network

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.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
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	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
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
0.71	11-1988	Impulsive noise measuring equipment for telephone-type circuits
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
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.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 14 400 bit/s, for use on the General Switched Telephone Network and on leased poin
V.61 (1996) Corrigendum 1	01-2005	
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.70 (1996) Corrigendum 1	01-2005	
V.75	08-1996	DSVD terminal control procedures
V.75 (1996) Corrigendum 1	01-2005	
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.76 (1996) Corrigendum 1	01-2005	
V.80	08-1996	In-band DCE control and synchronous data modes for asynchronous DTE
V.80 (1996) Amendment 1	07-2001	Additional data signalling rate codes in support of cellular systems
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	Update of Tables 18, 19, 31, 32, Figure 20 and Clauses 8.6.6, 8.7.6, 9.10.1, and 9.11	
V.92 (2000) Amendment 2	03-2002	New interaction facilities for error-correcting procedures	
V.92 (2000) Corrigendum 1	07-2003		
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	
V.120	10-1996	Support by an ISDN of data terminal equipment with V-series type interfaces with provision for statistical multiplexing	
V.120 (1996) Corrigendum 1	05-1999		
V.130	08-1995	ISDN terminal adaptor framework	
V.140	01-2005	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.150.1 (2003) Amendment 1	01-2005	Modification to SSE reason identifier codes to support voice band data and text relay	
V.152	01-2005	Procedures for supporting voice-band data over IP networks	
V.152 (2005) Corrigendum 1	09-2005		
V.230	11-1988	General data communications interface layer 1 specification	
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	
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	07-1999	A 128 (144) kbit/s data circuit-terminating equipment standardized for use on digital point-to-point leased circuits	

Recommendation count: 176

Series X : Data communication over the telephone network

Number	Approval Date	Recommendation Title	Status
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	
X.8	07-1994	Multi-aspect PAD (MAP) framework and service definition	
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	
V.11	10-1996	Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s	
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)	

X.31	11-1995	Support of packet mode terminal equipment by an ISDN
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 Servic
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	
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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
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X.852	12-1997	Information technology – Open Systems Interconnection – Protocol for the Commitment, Concurrency and Recovery service element: Protocol specification
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X.1081	04-2004	The telebiometric multimodal model – A framework for the specification of security and safety aspects of telebiometrics
X.1121	04-2004	Framework of security technologies for mobile end-to-end data communications
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Y.100	06-1998	General overview of the Global Information Infrastructure standards development	
Y.101	03-2000	Global Information Infrastructure terminology: Terms and definitions	
Y.110	06-1998	Global Information Infrastructure principles and framework architecture	
Y.120	06-1998	Global Information Infrastructure scenario methodology	
Y.120 (1998) Corrigendum 1	11-2000		
Y.120 Annex A	02-1999	Examples of use	
Y.130	03-2000	Information communication architecture	
Y.140	11-2000	Global Information Infrastructure (GII): Reference points for interconnection framework	
Y.140.1	03-2004	Guideline for attributes and requirements for interconnection between public telecommunication network operators and service providers involved in provision of telecommunication services	
Y.1001	11-2000	IP framework – A framework for convergence of telecommunications network and IP network technologies	
Y.1221	03-2002	Traffic control and congestion control in IP-based networks	
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Y.1281	09-2003	Mobile IP services over MPLS	
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G.807/Y.1302	07-2001	Requirements for automatic switched transport networks (ASTN)	
G.7041/Y.1303	08-2005	Generic framing procedure (GFP)	
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G.8010/Y.1306	02-2004	Architecture of Ethernet layer networks	
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G.8011.1/Y.1307. 1	08-2004	Ethernet private line service	
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Y.1414	07-2004	Voice services - MPLS network interworking	
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Z.100	08-2002	Specification and Description Language (SDL)	
Z.100 (2002) Amendment 1	10-2003	Backwards compatibility and compliance	
Z.100 (2002) Corrigendum 1	08-2004		
Z.100 Annex F1	11-2000	SDL formal definition: General overview	
Z.100 Annex F2	11-2000	SDL formal definition: Static semantics	Available only in PDF.
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