

## LIST OF ITU-T RECOMMENDATIONS

## **Edition 2003-1**

## **TABLE OF CONTENTS**

	Page
Introduction	3
Legend	4
List of ITU-T Recommendations in force	5
Mapping of ISO/IEC Standards to ITU-T Recommendations	173
Transferred ITU-R CMTT Recommendations to ITU-T J-Series	177
List of ITU-T Handbooks	179
List of ITU-T Software Packages	181
List of ITU-T Test Charts	186
Others ITU-T products	187
Sales and Distribution	190
Order Form	195

NOTE

For the latest, most up-to-date information please consult the ITU-T website at the following address: **www.itu.int/ITU-T/publications** 

ITU publications can be found under: www.itu.int/publications

© ITU 2003

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

#### **International Telecommunication Union**

Place des Nations CH-1211 Geneva 20

Switzerland

Telephone: + 41 22 730 51 11
Telefax: + 41 22 733 72 56
Telex: 421000 uit ch
Telegram: ITU GENEVE
E-mail: itumail@itu.int
Web: www.itu.int/

# ITU-T Telecommunication Standardization Bureau

Place des Nations CH-1211 Geneva 20

Switzerland

Telephone: + 41 22 730 58 52 Telefax: + 41 22 730 58 53 E-mail: tsbmail@itu.int

Electronic document handling: tsbedh@itu.int

Web: www.itu.int/itu-t

#### **International Telecommunication Union**

Sales and Marketing Division

Place des Nations CH-1211 Geneva 20

Switzerland

Telephone: + 41 22 730 61 41 (English) + 41 22 730 61 42 (Français)

+ 41 22 730 61 43 (Español)

Telefax: + 41 22 730 51 94
Telex: 421000 uit ch
E-mail: sales@itu.int

Web: www.itu.int/publications

The bookshop is open at the ITU Headquarters (Tower Building) in Geneva from 8h30 to 12h00 and from 13h30 to 17h00, Monday to Friday.

## INTRODUCTION

The main purpose of this List is to indicate all the ITU-T (formerly CCITT) Recommendations currently in effect at the date of its publication. In addition, the ITU-T Supplements which contain operational or other practical/implementation type of information related to a particular Series of Recommendations are listed at the end of that Series in the List.

Until 1990, (former) CCITT Recommendations were grouped for publication in fascicles of the CCITT Books. Since 1990, CCITT/ITU-T Recommendations have been published as individual booklets.

It should be noted that, within established ITU budgets, there is provision for translation of a number of ITU-T Recommendations into Arabic, Chinese and Russian. The choice of which Recommendations are translated is established in collaboration with the principal ITU Member Countries involved. Readers interested in such language versions should get in touch with ITU Sales and Marketing Division at the address provided in this List.

New Recommendations which are currently in the process of publication are noted as "To be published". At the date when a Recommendation is approved, there remain several steps in preparing and printing the texts so the actual publication date for these Recommendations is necessarily different from the approval date. When an electronic version of a recently-approved Recommendation becomes available the text is pre-published and can be downloaded (see the ITU Electronic Bookshop, page 191). Pre-published and superseded ITU-T Recommendations are now also available via the yearly online subscription service and the Electronic Bookshop.

When an ITU-T Recommendation is accompanied by addenda (Add.), amendments (Amd.) and/or corrigenda (Cor.), all documents should be purchased in order to have the complete information. All Series A Recommendations and the corrigenda may be downloaded for free from the ITU Website.

A few Recommendations include software written specifically to help customers, telecommunications service operators or manufacturers to test equipment, systems or networks. There is a list of available software on page 181.

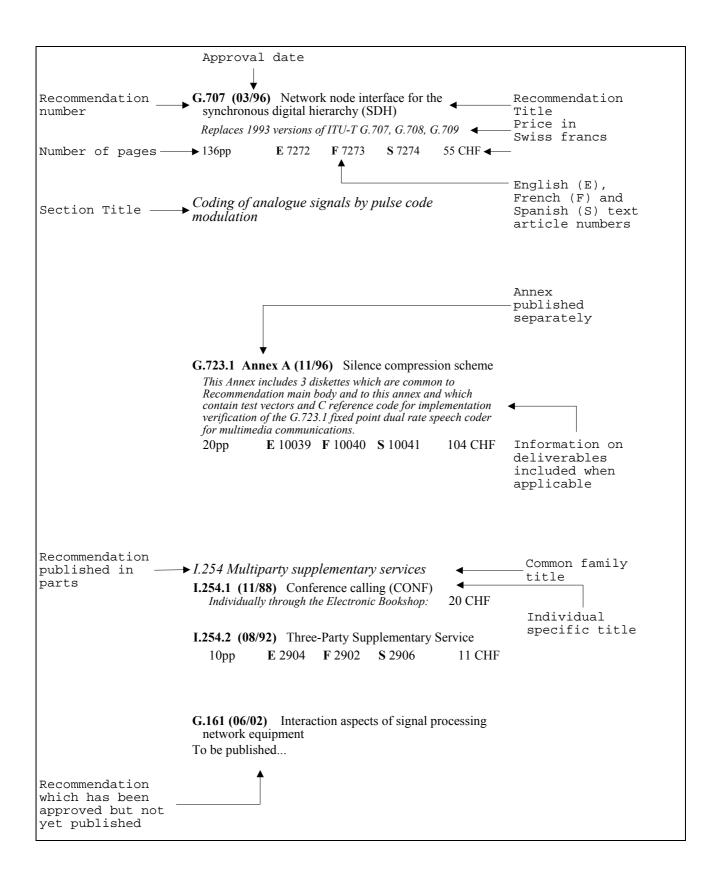
Other Recommendations describe test charts intended to test graphic communication systems. Test charts of special quality with different resolutions may be ordered separately from the ITU Sales Service, since the specimens reproduced in those Recommendations are generally not suited for measurements. The available test charts are listed on page 186.

While most of the foregoing applies to printed paper copies of ITU-T Recommendations, the same Recommendations are available electronically through the ITU Electronic Bookshop, the ITU-T Recommendations Online and ITU-T Recommendations on CD-ROM. More detailed information about these products and how to order them is provided at the end of this List. For forthcoming publications, please refer regularly to the Web: www.itu.int/publications.

Finally, if you require further information about the operations of the ITU Standardization Sector or the contents of ITU-T Recommendations, please use the address and numbers on page 2.

Telecommunication Standardization Bureau

## **LEGEND**



## List of ITU-T Recommendations in force

#### SERIES A

### Organization of the work of ITU-T

**A.1 (10/00)** Work Methods for Study Groups of the ITU Telecommunication Standardization Sector (ITU-T)

Free of charge from the Electronic Bookshop

17pp E 20202 F 20203 S 20204 12 CHF

**A.2** (10/00) Presentation of contributions relative to the study of Questions assigned to the ITU-T

Free of charge from the Electronic Bookshop

12pp E 20205 F 20206 S 20207 9 CHF

#### A.3 (10/96) Withdrawn (10/00)

Elaboration and presentation of texts and development of terminology and other means of expression for Recommendations of the ITU Telecommunication Standardization Sector

Deleted; an "ITU-T Recommendation author's guide" is available on ITU-T website

Free of charge from the Electronic Bookshop

E 14771 F 14771 S 14771 12 CHF

**A.4 (06/02)** Communication process between ITU-T and Forums and Consortia

Free of charge from the Electronic Bookshop

14pp E 22840 F 22841 S 22842 9 CHF

**A.5 (11/01)** Generic procedures for including references to documents of other organizations in ITU-T Recommendations

Free of charge from the Electronic Bookshop

8pp E 21663 F 21664 S 21665 9 CHF

**A.6 (06/02)** Cooperation and exchange of information between ITU-T and national and regional standards development organizations

Free of charge from the Electronic Bookshop

14pp E 22843 F 22844 S 22845 9 CHF

**A.7 (06/02)** Focus groups: Working methods and procedures

Free of charge from the Electronic Bookshop

12pp E 22846 F 22847 S 22848 9 CHF

**A.8** (10/00) Alternative approval process for new and revised Recommendations

Free of charge from the Electronic Bookshop

17pp E 20214 F 20215 S 20216 12 CHF

**A.9 (10/00)** Provisional working procedures for the Special Study Group on IMT-2000 and Beyond

Free of charge from the Electronic Bookshop

10pp E 20217 F 20218 S 20219 9 CHF

**A.11 (10/00)** Analytical method to calculate visibility statistics for non-geostationary satellite orbit satellites as seen from a point on the Earth's surface

Free of charge from the Electronic Bookshop

12pp E 20220 F 20221 S 20222

A.12 (10/00) Identification and layout of ITU-T Recommendations

Free of charge from the Electronic Bookshop

10pp E 20223 F 20224 S 20225 9 CHF

**A.13 (10/00)** Supplements to ITU-T Recommendations

Free of charge from the Electronic Bookshop

10pp E 20226 F 20227 S 20228 9 CHF

**A.23 Annex A (11/01)** Guide to ITU-T and ISO/IEC JTC1 cooperation

Free of charge from the Electronic Bookshop

#### A.30 (03/93) Withdrawn (10/00)

Major degradation or disruption of service

This Recommendation is also included but not published in F series under alias number F.12

This Recommendation, which was also included but not published in F series under alias number F.12, was deleted and its content transfered to ITU-T C.2

Free of charge from the Electronic Bookshop

E 14775 F 14775 S 14775 9 CHF

#### **Supplements to the Series A Recommendations**

**Suppl. 3 (01/03)** IETF and ITU-T collaboration guidelines

Available as a prepublished versionFree of charge from the Electronic Bookshop

To be published...

#### SERIES B

Means of expression: definitions, symbols, classification

#### B.1 (11/88) Withdrawn (10/00)

Letter symbols for telecommunications

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### **B.3 (11/88)** Withdrawn (10/00)

Use of the international system of units (SI)

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### B.10 (11/88) Withdrawn (10/00)

Graphical symbols and rules for the preparation of documentation in telecommunications

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### **B.11 (11/88)** Legal time – use of the term UTC

*Individually through the Electronic Bookshop:* 20 CHF

#### **B.12 (11/88)** Withdrawn (03/02)

Use of the decibel and the neper in telecommunications

Deleted since its content is covered by ITU-T Rec. G.100.1 Individually through the Electronic Bookshop: 20 CHF

### B.13 (11/88) Withdrawn (10/00)

Terms and definitions

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### B.14 (11/88) Withdrawn (10/00)

Terms and symbols for information quantities in telecommunications

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### B.15 (10/96) Withdrawn (10/00)

Nomenclature of the frequency and wavelength bands used in telecommunications

Deleted; refer to ITU-R definitions

8pp E 11647 F 11648 S 11649 9 CHF

#### B.16 (11/88) Withdrawn (10/00)

Use of certain terms linked with physical quantities

Deleted; refer to ITU-R definitions

*Individually through the Electronic Bookshop:* 20 CHF

# **B.17 (11/88)** Adoption of the CCITT Specification and description Language (SDL)

Individually through the Electronic Bookshop: 20 CHF

#### B.19 (10/96) Withdrawn (10/00)

Abbreviations and initials used in telecommunications

Deleted after its content became technically out of date

8pp E 11176 F 11177 S 11178 9 CHF

#### SERIES C

# General telecommunication statistics

#### C.1 (03/93) Withdrawn (10/00)

ITU statistical yearbook

Deleted after the transfer of telecommunication statistics activity to ITU-D

10pp E 5555 F 5554 S 5556 11 CHF

#### C.3 (03/93) Withdrawn (09/02)

Instructions for international telecommunication services

Given that the text of Rec. C.3 consists of an index to a number of Recommendations which are now of little or no practical use, it was decided to delete it. Electronic access to ITU-T Recommendations would appear to provide a better index and reference mechanisms

1pp E 3702 F 3701 S 3703 8 CHF

#### SERIES D

## General tariff principles

#### Terms and definitions

**D.000 (06/02)** Terms and definitions for the D-series Recommendations

14pp E 22534 F 22535 S 22536 12 CHF

#### General tariff principles

#### Private leased telecommunication facilities

**D.1 (07/91)** General principles for the lease of international (continental and intercontinental) private telecommunication circuits and networks

8pp E 2164 F 2163 S 2165 10 CHF

**D.3 (06/92)** Principles for the lease of analogue international circuits for private service

2pp E 2622 F 2653 S 2684 8 CHF

**D.4 (12/98)** Special conditions for the lease of international (continental and intercontinental) sound- and television-programme circuits for private service

12pp E 16030 F 16031 S 16032 12 CHF

**D.5 (11/88)** Costs and value of services rendered as factors in the fixing of rates

*Individually through the Electronic Bookshop:* 20 CHF

**D.7 (01/92)** Concept and implementation of "one-stop shopping" for international private leased telecommunication circuits

3pp E 2602 F 2631 S 2662 8 CHF

D.8 (11/88) Special conditions for the lease of international end-to-end digital circuits for private service

*Individually through the Electronic Bookshop:* 20 CHF

**D.9 (11/88)** Private leasing of transmitters or receivers

*Individually through the Electronic Bookshop:* 20 CHF

Tariff principles applying to data communication services over dedicated public data networks

**D.10 (07/91)** General tariff principles for international public data communication services

3pp E 2137 F 2136 S 2138 7 CHF

**D.11 (03/91)** Special tariff principles for international packet-switched public data communication services by means of the virtual call facility

3pp E 1978 F 1977 S 1979 7 CHF

**D.12 (11/88)** Measurement unit for charging by volume in the international packet-switched data communication service

*Individually through the Electronic Bookshop:* 20 CHF

**D.13 (11/88)** Guiding principles to govern the apportionment of accounting rates in international packet-switched public data communication relations

Individually through the Electronic Bookshop: 20 CHF

**D.15 (11/88)** General charging and accounting principles for non-voice services provided by interworking between public data networks

*Individually through the Electronic Bookshop:* 20 CHF

**D.20 (11/88)** Special tariff principles for the international circuit-switched public data communication services

*Individually through the Electronic Bookshop:* 20 CHF

**D.21 (11/88)** Special tariff principles for short transaction transmissions on the international packet-switched public data networks using the fast select facility with restriction

*Individually through the Electronic Bookshop:* 20 CHF

**D.30 (11/88)** Implementation of reverse charging on international public data communication services

*Individually through the Electronic Bookshop:* 20 CHF

**D.35 (01/92)** General charging principles in the international public message handling services and associated applications

2pp E 2600 F 2629 S 2660 8 CHF

**D.36 (03/95)** General accounting principles applicable to message handling services and associated applications

12pp E 6090 F 6089 S 6091 11 CHF

**D.37 (07/96)** Accounting and settlement principles applicable to the provision of public directory services between interconnected Directory Management Domains

12pp E 7475 F 7476 S 7477 12 CHF

Charging and accounting in the international public telegram service

**D.40 (06/92)** General tariff principles applicable to telegrams exchanged in the international public telegram service

4pp E 2694 F 2693 S 2695 8 CHF

D.41 (11/88) Introduction of accounting rates by zones in the international public telegram serviceIndividually through the Electronic Bookshop: 20 CHF

**D.42 (11/88)** Accounting in the international public telegram service

*Individually through the Electronic Bookshop:* 20 CHF

**D.43 (11/88)** Partial and total refund of charges in the international public telegram service

A Corrigendum was indicated in 02/1990 for the English version.

*Individually through the Electronic Bookshop:* 20 CHF

Charging and accounting in the international telemessage service

**D.45 (06/92)** Charging and accounting principles for the international telemessage service

2pp E 2627 F 2658 S 2689 8 CHF

#### Principles applicable to GII-Internet

#### **D.50** (11/88) Withdrawn (10/96)

Tariff and international accounting principles for the international teletex service

Deleted as a consequence of the suppression of Teletex service

*Individually through the Electronic Bookshop:* 20 CHF

**D.50 (10/00)** International Internet Connection

4pp E 19683 F 19684 S 19685 9 CHF

Charging and accounting in the international telex service

**D.60 (07/91)** Guiding principles to govern the apportionment of accounting rates in intercontinental telex relations

2pp E 2140 F 2139 S 2141 7 CHF

**D.61 (11/88)** Charging and accounting provisions relating to the measurement of the chargeable duration of a telex call

*Individually through the Electronic Bookshop:* 20 CHF

**D.65** (11/88) General charging and accounting principles in the international telex service for multi-address messages via store-and-forward units

*Individually through the Electronic Bookshop:* 20 CHF

**D.67 (03/95)** Charging and accounting in the international telex service

4pp E 5852 F 5851 S 5853 8 CHF

Charging and accounting in the international facsimile service

**D.70 (06/92)** General tariff principles for the international public facsimile service between public bureaux (bureaufax service)

3pp E 2691 F 2690 S 2692 8 CHF

**D.71 (06/92)** General tariff principles for the public facsimile service between subscriber stations (telefax service)

2pp E 2626 F 2657 S 2688 8 CHF

**D.73 (06/92)** General tariff and international accounting principles for interworking between the international bureaufax and telefax services

2pp E 2623 F 2654 S 2685 8 CHF

Charging and accounting in the international videotex service

**D.79 (07/91)** Charging and accounting principles for the international videotex service

5pp E 2146 F 2145 S 2147 7 CHF

Charging and accounting in the international phototelegraph service

**D.80 (11/88)** Accounting and refunds for phototelegrams

Individually through the Electronic Bookshop: 20 CHF

**D.81 (11/88)** Accounting and refunds for private phototelegraph calls

*Individually through the Electronic Bookshop:* 20 CHF

**D.83 (11/88)** Rates for phototelegrams and private phototelegraph calls

*Individually through the Electronic Bookshop:* 20 CHF

**D.85 (11/88)** Charging for international phototelegraph calls to multiple destinations *Individually through the Electronic Bookshop:* 20 CHF

Charging and accounting in the mobile services

**D.90 (03/95)** Charging, billing, international accounting and settlement in the maritime mobile service

The date of entry into force of this Recommendation was fixed at the 01 July 1995.

Covering note, May 1999: Spanish only

24pp E 6126 F 6125 S 6127 15 CHF

**D.91 (07/96)** Transmission in encoded form of maritime telecommunications accounting information

TSB circular 125 (29 June 1998) and corresponding covering note detail year 2000 issues regarding the interpretation of transmitted year data.

28pp E 7478 F 7479 S 7480 17 CHF

**D.93 (04/00)** Charging and accounting in the international land mobile telephone service (provided via cellular radio systems)

20pp E 19974 F 19975 S 19976 17 CHF

**D.94 (01/92)** Charging, billing and accounting principles for international aeronautical mobile service, and international aeronautical mobile-satellite service

4pp E 2601 F 2630 S 2661 8 CHF

**D.95 (10/92)** Charging, billing, accounting and refunds in the data messaging land/maritime mobile-satellite service

8pp E 3227 F 3226 S 3228 11 CHF

**D.96 (12/99)** Charging, billing, accounting and settlement principles for Global Mobile Personal Communications by Satellite (GMPCS) for the international telephone service

28pp E 17694 F 17695 S 17696 17 CHF

#### D.98 (03/93) Withdrawn (10/96)

Charging and accounting provisions relating to the transferred account telegraph and telematic services

Deleted after its content became technically out of date

Charging and accounting in the international telephone service

**D.100 (11/88)** Charging for international calls in manual or semi-automatic operating

Individually through the Electronic Bookshop: 20 CHF

**D.103 (06/92)** Charging in automatic service for calls terminating on a recorded announcement stating the reason for the call not being completed

This Recommendation is also included but not published in E series under alias number E.231

1pp E 2625 F 2656 S 2687 8 CHF

**D.104 (11/88)** 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

This Recommendation is also published under alias number E.232

*Individually through the Electronic Bookshop:* 20 CHF

**D.105 (11/88)** Charging for calls from or to a public call office

*Individually through the Electronic Bookshop:* 20 CHF

**D.106 (11/88)** Introduction of reduced rates during periods of light traffic in international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

**D.110 (06/92)** Charging and accounting for conference calls

1pp E 2621 F 2652 S 2683 8 CHF

**D.115 (10/96)** Tariff principles and accounting for the International Freephone Service (IFS)

8pp E 9994 F 9995 S 9996 9 CHF

**D.116 (10/96)** Charging and accounting principles relating to the home country direct telephone service

8pp E 9997 F 9998 S 9999 9 CHF

**D.117 (06/99)** Charging and accounting principles for the international premium rate service (IPRS)

8pp E 16135 F 16136 S 16137 9 CHF

**D.120 (07/96)** Charging and accounting principles for the international telecommunication charge card service

8pp E 7323 F 7324 S 7325 9 CHF

Charging and accounting for international satellite services

**D.140 (06/02)** Accounting rate principles for the international telephone service

22pp E 22602 F 22603 S 22604 17 CHF

**D.140 Amendment 1 (12/02)** New Appendix to Annex C: Guidelines

To be published...

**D.140 Supplement 1 (06/02)** Updated teledensities and indicative target settlement rates

12pp E 22809 F 22810 S 22811 9 CHF

Charging and accounting in the international telephone service

**D.150 (06/99)** New system for accounting in international telephony

20pp E 16059 F 16060 S 16061 17 CHF

**D.151 (11/88)** Old system for accounting in international telephony

A correction was introduced in a Covering note by June 1990

*Individually through the Electronic Bookshop:* 20 CHF

**D.155 (07/96)** Guiding principles governing the apportionment of accounting rates in intercontinental telephone relations

8pp E 7409 F 7410 S 7411 9 CHF

Drawing up and exchange of international telephone and telex accounts

**D.160 (11/88)** 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

*Individually through the Electronic Bookshop:* 20 CHF

**D.170 (06/98)** Monthly telephone and telex accounts

16pp E 13757 F 13758 S 13759 12 CHF

**D.171 (11/88)** Adjustments and refunds in the international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

**D.172 (11/88)** Accounting for calls circulated over international routes for which accounting rates have not been established

*Individually through the Electronic Bookshop:* 20 CHF

**D.173 (11/88)** Defaulting subscribers

Individually through the Electronic Bookshop: 20 CHF

**D.174 (11/88)** Conventional transmission of information necessary for billing and accounting regarding collect and credit card calls

*Individually through the Electronic Bookshop:* 20 CHF

**D.176 (12/97)** Transmission in encoded form of telephone reversed charge billing and accounting information

TSB circular 125 (29 June 1998) and corresponding covering note detail year 2000 issues regarding the interpretation of transmitted year data.

12pp E 13895 F 13896 S 13897 12 CHF

**D.177 (11/88)** Adjustment of charges and refunds in the international telex service

*Individually through the Electronic Bookshop:* 20 CHF

**D.178 (03/93)** Monthly accounts for semi-automatic telephone calls (ordinary and urgent calls, with or without special facilities)

1pp E 4201 F 4200 S 4202 8 CHF

International sound- and television-programme transmissions

**D.180 (06/02)** Occasional provision of circuits for international sound- and television-programme transmissions

22pp E 22800 F 22801 S 22802 17 CHF

Charging and accounting for international satellite services

**D.185 (11/88)** General tariff and accounting principles for international one-way point-to-multipoint satellite services

*Individually through the Electronic Bookshop:* 20 CHF

**D.186 (10/96)** General tariff and accounting principles for international two-way multipoint telecommunication service via satellite

12pp E 10003 F 10004 S 10005 12 CHF

**D.188 (10/92)** General charging and accounting principles applicable to an international videoconferencing service

3pp E 3207 F 3206 S 3208 8 CHF

Transmission of monthly international accounting information

**D.190 (06/02)** Exchange of international traffic accounting data between Administrations using electronic data interchange (EDI) techniques

14pp E 22569 F 22570 S 22571 12 CHF

Service and privilege telecommunications

**D.192 (06/92)** Principles for charging and accounting of service telecommunications

2pp E 2624 F 2655 S 2686 8 CHF

D.193 (11/88) Special tariff principles for privilege telecommunications

*Individually through the Electronic Bookshop:* 20 CHF

Settlement of international telecommunication balances of accounts

**D.196 (06/92)** Clearing of international telecommunication balances of accounts

2pp E 2620 F 2651 S 2682 8 CHF

**D.197 (07/91)** Notification of change of address(es) for accounting and settlement purposes

3pp E 2119 F 2118 S 2120 7 CHF

#### Terms and definitions

**D.201 (12/02)** General principles regarding call-back practices

8pp E 23048 F 23049 S 23050 9 CHF

#### General tariff principles

Charging and accounting principles for international telecommunication services provided over the ISDN

**D.210 (09/94)** General charging and accounting principles for international telecommunication services provided over the Integrated Services Digital Network (ISDN)

3pp E 5647 F 5646 S 5648 8 CHF

**D.211 (12/98)** International accounting for the use of the signal transfer point and/or signalling point for relay in Signalling System No. 7

8pp E 16027 F 16028 S 16029 9 CHF

**D.212 (10/96)** Charging and accounting principles for the use of Signalling System No. 7

8pp E 9962 F 9963 S 9964 9 CHF

**D.220 (03/91)** Charging and accounting principles to be applied to international circuit-mode demand bearer services provided over the integrated services digital network (ISDN)

2pp E 2003 F 2002 S 2004 7 CHF

**D.224 (12/99)** Charging and accounting principles for ATM/B-ISDN

24pp E 17776 F 17777 S 17778 17 CHF

**D.225 (12/97)** Charging and accounting principles to be applied to frame relay data transmission service

8pp E 13703 F 13704 S 13705 9 CHF

**D.230 (03/95)** General charging and accounting principles for supplementary services associated with international telecommunication services provided over the Integrated Services Digital Network (ISDN)

2pp E 5979 F 5978 S 5980 8 CHF

**D.231 (11/88)** Charging and accounting principles relating to the User-to-User Information (UUI) supplementary service

*Individually through the Electronic Bookshop:* 20 CHF

**D.232 (05/97)** Specific tariff and accounting principles applicable to ISDN supplementary services

12pp E 11632 F 11633 S 11634 12 CHF

**D.233 (07/96)** Charging and accounting principles to be applied to the reversed charge supplementary service

8pp E 7415 F 7416 S 7417 9 CHF

**D.240 (03/91)** Charging and accounting principles for teleservices supported by the ISDN

2pp E 2015 F 2014 S 2016 7 CHF

**D.250 (07/91)** General charging and accounting principles for non-voice services provided by interworking between the ISDN and existing public data networks

2pp E 2125 F 2124 S 2126 7 CHF

**D.251 (11/88)** 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

*Individually through the Electronic Bookshop:* 20 CHF

**D.260 (03/91)** Charging and accounting capabilities to be applied on the ISDN

3pp E 2027 F 2026 S 2028 7 CHF

Charging and accounting principles for universal personal telecommunication

**D.280 (03/95)** Principles for charging and billing, accounting and reimbursements for universal personal telecommunication

15pp E 6120 F 6119 S 6121 15 CHF

Charging and accounting principles for intelligent network supported services

**D.285 (07/96)** Guiding principles for charging and accounting for intelligent network supported services

12pp E 7481 F 7482 S 7483 12 CHF

**D.286 (07/96)** Charging and accounting principles for the global virtual network service

8pp E 7484 F 7485 S 7486 9 CHF

#### Recommendations for regional application

Recommendations applicable in Europe and the Mediterranean Basin

**D.300R (03/95)** Determination of accounting rate shares in telephone relations between countries in Europe and the Mediterranean Basin

Covering note, August 1998: Applicability of 1992 values of standard accounting rate shares components

10pp E 6102 F 6101 S 6103 11 CHF

**D.301R (03/95)** Determination of accounting rate shares and collection charges in telex relations between countries in Europe and the Mediterranean Basin

Covering note, August 1998: Applicability of 1984 values of standard accounting rate shares components

11pp E 6150 F 6149 S 6151 11 CHF

**D.302R (03/95)** 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

Covering note, August 1998: Applicability of 1984 values of standard transition and terminal rate shares components

3pp E 5976 F 5975 S 5977 8 CHF

**D.303R (03/95)** 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

Covering note, August 1998: Applicability of 1984 values of standard accounting rate shares components

12pp E 6147 F 6146 S 6148 11 CHF

#### D.305R (11/88) Withdrawn (03/95)

Remuneration for facilities used for the switched-transit handling of intercontinental telephone traffic in a country in Europe or the Mediterranean Basin

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

**D.306R (07/91)** Remuneration of public packet-switched data transmission networks between the countries of Europe and the Mediterranean Basin

2pp E 2122 F 2121 S 2123 7 CHF

**D.307R (03/95)** Remuneration of digital systems and channels used in telecommunication relations between the countries of Europe and the Mediterranean Basin

Covering note, August 1998: Applicability of 1984 values of flat-rate remuneration

4pp E 6129 F 6128 S 6130 8 CHF

**D.310R (03/95)** 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

Covering note, August 1998: Applicability of 1984 values of the annual rental

2pp E 5984 F 5983 S 5985 8 CHF

#### D.390R (11/88) Withdrawn (03/95)

Accounting system in the international automatic telephone service

Deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

Recommendations applicable in Latin America

**D.400R (12/99)** Accounting rates applicable to direct traffic relations in voice telephony between countries in Latin America and the Caribbean

24pp E 17956 F 17957 S 17958 17 CHF

#### D.401R (11/88) Withdrawn (09/98)

Accounting rates applicable to telex relations between countries in Latin America

Deleted following a proposal from the Tariff Group for Latin America and the Caribbean because the maximum rates indicated in this Recommendation cannot be used for negotiating accounting rates

*Individually through the Electronic Bookshop:* 20 CHF

#### Recommendations applicable in Asia and Oceania

**D.500R (06/98)** Accounting rates applicable to telephone relations between countries in Asia and Oceania

16pp E 15428 F 15429 S 15430 12 CHF

**D.501R (10/93)** Accounting rates applicable to telex relations between countries in Asia and Oceania

2pp E 4668 F 4667 S 4669 8 CHF

Recommendations applicable to the African Region

**D.600R (10/00)** Implementor's guide for Recommendation G.763 (14 April 2000)

22pp E 19630 F 19631 S 19632 17 CHF

**D.601R (10/93)** Determination of accounting rate shares and collection charges in telex relations between countries in Africa

8pp E 5163 F 5221 S 5256 11 CHF

Recommendations applicable in Asia and Oceania

**D.602R (12/02)** General principles regarding call-back practices

8pp E 23045 F 23046 S 23047 9 CHF

**D.603R (12/02)** Minimizing collection charges on inter-African calls

8pp E 23057 F 23058 S 23059 9 CHF

Recommendations applicable to the African Region

**D.606R (11/88)** Preferential rates in telecommunication relations between countries in Africa

*Individually through the Electronic Bookshop:* 20 CHF

### **Supplements to the Series D Recommendations**

Suppl. 1 (11/88) Cost and tariff study method

**Suppl. 2 (11/88)** Method for carrying out a cost price study by regional tariff groups

**Suppl. 3 (03/93)** Handbook on the methodology for determining costs and establishing national tariffs

44pp E 7508 F 7509 S 7510 22 CHF

#### SERIES E

Overall network operation, telephone service, service operation and human factors

#### **International operation**

#### **Definitions**

**E.100 (11/88)** Definitions of terms used in international telephone operation *Individually through the Electronic Bookshop:* 20 CHF

#### General provisions concerning Administrations

**E.104 (02/95)** International telephone directory assistance service and public access

2pp E 5858 F 5857 S 5859 8 CHF

E.105 (08/92) International telephone service

6pp E 3010 F 3003 S 3017 8 CHF

**E.106 (03/00)** Description of an international emergency preference scheme (IEPS)

12pp E 18180 F 18181 S 18182 12 CHF

**E.109 (02/95)** International billed number screening procedures for collect and third-party calling

4pp E 5861 F 5860 S 5862 8 CHF

**E.110 (11/88)** Organization of the international telephone network

*Individually through the Electronic Bookshop:* 20 CHF

**E.111 (11/88)** Extension of international telephone services

*Individually through the Electronic Bookshop:* 20 CHF

**E.112 (11/88)** Arrangements to be made for controlling the telephone services between two countries

*Individually through the Electronic Bookshop:* 20 CHF

**E.113 (05/97)** Validation procedures for the international telecommunications charge card service 12pp E 11994 F 11995 S 11996 12 CHF

**E.114 (11/88)** Supply of lists of subscribers (directories and other means)

*Individually through the Electronic Bookshop:* 20 CHF

**E.115 (02/95)** Computerized directory assistance 22pp E 5995 F 5994 S 5996 15 CHF

**E.116 (05/97)** International telecommunication charge card service

16pp E 11883 F 11884 S 11885 12 CHF

**E.117 (06/94)** Terminal devices used in connection with the public telephone service (other than telephones)

2pp E 5185 F 5235 S 5270 8 CHF

**E.118 (02/01)** The international telecommunication charge card

16pp E 20927 F 20928 S 20929 12 CHF

#### General provisions concerning users

**E.120 (11/88)** Instructions for users of the international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

**E.121 (07/96)** Pictograms, symbols and icons to assist users of the telephone service

24pp E 7391 F 7392 S 7393 17 CHF

**E.122 (11/88)** Measures to reduce customer difficulties in the international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

**E.123 (02/01)** Notation for national and international telephone numbers, e-mail addresses and Web addresses

14pp E 20897 F 20898 S 20899 12 CHF

**E.124 (11/88)** Discouragement of frivolous international calling to unassigned or vacant numbers answered by recorded announcements without charge

*Individually through the Electronic Bookshop:* 20 CHF

**E.125 (10/84)** Inquiries among users of the international telephone service

Electronic Bookshop only

20 CHF

**E.126 (11/88)** Harmonization of the general information pages of the telephone directories published by administrations

*Individually through the Electronic Bookshop:* 20 CHF

E.127 (11/88) Pages in the telephone directory intended for foreign visitors

*Individually through the Electronic Bookshop:* 20 CHF

**E.128 (11/88)** Leaflet to be distributed to foreign visitors

*Individually through the Electronic Bookshop:* 20 CHF

#### General provisions concerning Administrations

**E.129 (09/02)** Presentation of national numbering plans

19pp E 22915 F 22916 S 22917 12 CHF

#### General provisions concerning users

**E.130 (11/88)** Choice of the most useful and desirable supplementary telephone services

*Individually through the Electronic Bookshop:* 20 CHF

**E.131 (11/88)** Subscriber control procedures for supplementary telephone services

*Individually through the Electronic Bookshop:* 20 CHF

**E.132 (11/88)** Standardization of elements of control procedures for supplementary telephone services

*Individually through the Electronic Bookshop:* 20 CHF

E.133 (11/88) Operating procedures for cardphones

*Individually through the Electronic Bookshop:* 20 CHF

**E.134 (03/93)** Human factors aspects of public terminals: generic operating procedures

4pp E 3935 F 3934 S 3936 8 CHF

**E.135 (10/95)** Human factors aspects of public telecommunication terminals for people with disabilities

12pp E 6452 F 6453 S 6454 11 CHF

**E.136 (05/97)** Specification of a tactile identifier for use with telecommunication cards

8pp E 11982 F 11983 S 11984 9 CHF

E.137 (05/97) User instructions for payphones

16pp E 12028 F 12029 S 12030 12 CHF

#### General provisions concerning Administrations

**E.138 (06/02)** Human factors aspects of public telephones to improve their usability for older people

28pp E 22697 F 22698 S 22699 17 CHF

#### E.138 Erratum 1 (02/03)

To be published...

14

#### Operation of international telephone services

E.140 (08/92) Operator-assisted telephone service

4pp E 3012 F 3005 S 3019 8 CHF

**E.141 (03/93)** Instructions for operators on the operator-assisted international telephone service

Issued as an independant instructions handbook

E 3382 F 3381 S 3383 23 CHF

**E.148 (11/88)** Routing of traffic by automatic transit exchanges

*Individually through the Electronic Bookshop:* 20 CHF

E.149 (11/88) Presentation of routing data

*Individually through the Electronic Bookshop:* 20 CHF

#### E.150 (11/88) Withdrawn (02/96)

Publication of a "list of international telephone routes"

Deleted after ITU-T decision not to publish the list due to the impossibility of updating it in the existing international environment

*Individually through the Electronic Bookshop:* 20 CHF

E.151 (08/92) Telephone conference calls

2pp E 3013 F 3006 S 3020 8 CHF

E.152 (02/01) International freephone service

36pp E 21209 F 21210 S 21211 17 CHF

E.153 (10/96) Home country direct

8pp E 10836 F 10837 S 10838 9 CHF

E.154 (03/98) International shared cost service

28pp E 13475 F 13476 S 13477 17 CHF

E.155 (03/98) International premium rate service

25pp E 13456 F 13457 S 13548 17 CHF

**E.155 Amendment 1 (02/01)** The international telecommunication charge card

6pp E 20879 F 20880 S 20881 9 CHF

Numbering plan of the international telephone service

#### E.160 (03/93) Withdrawn (05/97)

Definitions relating to national and international numbering plans

The content of this Recommendation is now covered by ITU-T E.164 (1997)

5pp E 4563 F 4562 S 4564 8 CHF

**E.161 (02/01)** Arrangement of digits, letters and symbols on telephones and other devices that can be used for gaining access to a telephone network

14pp E 20885 F 20886 S 20887 12 CHF

**E.162 (04/95)** Capability for seven digit analysis of international E.164 numbers at time T

1pp E 5989 F 5988 S 5990 8 CHF

#### E.163 (11/88) Withdrawn (08/91)

Numbering plan for the international telephone service

The content of this Recommendation was incorporated in ITU-T E.164 (1991)

*Individually through the Electronic Bookshop:* 20 CHF

**E.164 (05/97)** The international public telecommunication numbering plan

Replaces former E.163 numbering plan

24pp E 11877 F 11878 S 11879 17 CHF

**E.164 Supplement 1 (03/98)** Alternatives for carrier selection and network identification

16pp E 13513 F 13514 S 13515 12 CHF

E.164 Supplement 2 (11/98) Number Portability

24pp E 15318 F 15319 S 15320 17 CHF

Numbering plan and dialling procedures in the international service

**E.164 Supplement 3 (05/02)** Supplement 3: Operational and administrative issues associated with national implementations of the ENUM functions

30pp E 22932 F 22933 S 22934 17 CHI

Numbering plan of the international telephone service

**E.164.1 (03/98)** Criteria and procedures for the reservation, assignment and reclamation of E.164 country codes and associated Identification Codes (ICs)

20pp E 13311 F 13312 S 13313 17 CHF

**E.164.2 (02/01)** E.164 numbering resources for trials

10pp E 20900 F 20901 S 20902 9 CHF

**E.164.3 (09/01)** Principles, criteria and procedures for the assignment and reclamation of E.164 country codes and associated identification codes for groups of countries

Available as a prepublished versionTo be published...

**E.165 (11/88)** Timetable for coordinated implementation of the full capability of the numbering plan for the ISDN era (Recommendation E.164)

This Recommendation is also published under alias number Q.11 ter

Individually through the Electronic Bookshop: 20 CHF

**E.165.1 (10/96)** Use of escape code "0" within the E.164 numbering plan during the transition period to implementation of NPI mechanism

8pp E 10006 F 10007 S 10008 9 CHF

#### Public data networks

**E.166/X.122 (03/98)** Numbering plan interworking for the E.164 and X.121 numbering plans

This Recommendation is published with the double number E.166 and X.122

44pp E 13314 F 10010 S 10011 22 CHF

**E.167 (11/88)** ISDN network identification codes *Individually through the Electronic Bookshop:* 20 CHF

Numbering plan and dialling procedures in the international service

**E.168 (05/02)** Application of E.164 numbering plan for UPT

18pp E 22426 F 22427 S 22428 12 CHF

**E.168.1 (05/02)** Assignment procedures for universal personal telecommunications (UPT) numbers in the provisioning of the UPT service

20pp E 22426 F 22427 S 22428 12 CHF

Numbering plan of the international telephone service

**E.169 (05/02)** Application of Recommendation E.164 numbering plan for universal international numbers for international telecommunications services using country codes for global services

13pp E 23079 F 23080 S 23081 12 CHF

**E.169.1 (09/01)** Application of Recommendation E.164 numbering plan for universal international freephone numbers for international freephone service

This version is a revision of former Rec. E.169 (11/1998) 30pp E 21715 F 21716 S 21717 17 CHF

**E.169.2 (10/00)** Application of Recommendation E.164 numbering plan for universal international premium rate numbers for the international premium rate service

24pp E 18897 F 18898 S 18899 17 CHF

**E.169.3 (10/00)** Application of Recommendation E.164 numbering plan for universal international shared cost numbers for international shared cost service

24pp E 18771 F 18772 S 18773 17 CHF

International routing plan

**E.170 (10/92)** Traffic routing

8pp E 3277 F 3276 S 3278 8 CHF

**E.171 (11/88)** International telephone routing plan *Individually through the Electronic Bookshop:* 20 CHF

**E.172 (10/92)** ISDN routing plan

Replaces ITU-T 1.335 (1988).

18pp E 3354 F 3353 S 3355 15 CHF

**E.173 (08/91)** Routing plan for interconnection between public land mobile networks and fixed terminal networks

12pp E 2339 F 2317 S 2361 10 CHF

**E.174 (04/95)** Routing principles and guidance for Universal Personal Telecommunications (UPT)

9pp E 6162 F 6161 S 6163 11 CHF

**E.175 (11/88)** Models for international network planning

*Individually through the Electronic Bookshop:* 20 CHF

**E.177 (10/96)** B-ISDN routing

16pp E 10012 F 10013 S 10014 12 CHF

Tones in national signalling systems

**E.180/Q.35 (03/98)** Technical characteristics of tones for the telephone service

This Recommendation is published with the double number E.180 and Q.35

16pp E 13110 F 13111 S 13112 12 CHF

**E.181 (11/88)** Customer recognition of foreign tones *Individually through the Electronic Bookshop:* 20 CHF

**E.182 (03/98)** Application of tones and recorded announcements in telephone services

12pp E 13244 F 13246 S 13248 12 CHF

**E.183 (03/98)** Guiding principles for telephone announcements

8pp E 13250 F 13253 S 13255 9 CHF

E.184 (11/88) Indications to users of ISDN terminals

Individually through the Electronic Bookshop: 20 CHF

Numbering plan of the international telephone service

**E.190 (05/97)** Principles and responsibilities for the management, assignment and reclamation of E-series international numbering resources

12pp E 11785 F 11786 S 11787 12 CHF

**E.191 (03/00)** B-ISDN addressing

22pp E 17930 F 17931 S 17932 17 CHF

E.191 Corrigendum 1 (02/02)

Published as a covering note. Cancels erratum of March 2001

**E.191.1 (02/01)** Criteria and procedures for the allocation of the ITU-T International Network Designator addresses

14pp E 22154 F 22155 S 22156 12 CHF

**E.193 (03/00)** E.164 country code expansion

16pp E 18191 F 18194 S 18193 12 CHF

**E.195** (10/00) ITU-T International numbering resource administration

12pp E 18736 F 18737 S 18738 12 CHF

Maritime mobile service and public land mobile service

#### E.200 (07/96) Withdrawn (10/96)

Operational provisions for the maritime mobile service

E.200 was an alias name of ITU-T F.110. Only this alias name was suppressed. ITU-T F.110 remains valid

#### E.201 (08/91) Withdrawn (09/02)

Reference recommendation for mobile services

This Recommendation was deleted since it has not been updated since 1991

9pp E 2335 F 2313 S 2357 10 CHF

**E.202 (10/92)** Network operational principles for future public mobile systems and services

6pp E 3268 F 3267 S 3269 8 CHF

**E.210** (11/88) Ship station identification for VHF/UHF and maritime mobile-satellite services

This Recommendation is also published under alias number F.120. For more details, see F.120

*Individually through the Electronic Bookshop:* 20 CHF

#### E.211 (11/88) Withdrawn (02/02)

Selection procedures for VHF/UHF maritime mobile services

Deleted because E.211 has no service function

Individually through the Electronic Bookshop: 20 CHF

**E.212 (11/98)** The international identification plan for mobile terminals and mobile users

8pp E 14489 F 14490 S 14491 9 CHF

**E.213 (11/88)** Telephone and ISDN numbering plan for land mobile stations in public land mobile networks (PLMN)

*Individually through the Electronic Bookshop:* 20 CHF

**E.214 (11/88)** Structure of the land mobile global title for the signalling connection control Part (SCCP)

*Individually through the Electronic Bookshop:* 20 CHF

**E.215 (05/97)** Telephone/ISDN numbering plan for the mobile-satellite services of Inmarsat

20pp E 11828 F 11829 S 11830 17 CHF

#### E.216 (03/93) Withdrawn (10/96)

Selection procedures for the INMARSAT mobile-satellite telephone and ISDN services

Only the previous edition (1988) of ITU-T E.216 was published. 1993 edition was never published and the out-of-date Recommendation was definitively suppressed in 1996

**E.217 (05/02)** Maritime communications – Ship station identity

To be published...

**E.220 (02/96)** Interconnection of public land mobile networks (PLMN)

8pp E 7136 F 7137 S 7138 9 CHF

Operational provisions relating to charging and accounting in the international telephone service

Charging in the international telephone service

E.230 (08/92) Chargeable duration of calls

1pp E 3014 F 3007 S 3021 8 CHF

**E.231 (06/92)** Charging in automatic service for calls terminating on a recorded announcement stating the reason for the call not being completed

This Recommendation is published under alias number D.103

**E.232 (11/88)** 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

This Recommendation is also published under alias number D.104. For more details, see D.104

*Individually through the Electronic Bookshop:* 20 CHF

#### E.251 (11/88) Withdrawn (02/98)

Old system for accounting in international telephony

E.251 was an alias name of ITU-T D.151. Only this alias name was suppressed. ITU-T D.151 remains valid

#### E.252 (11/88) Withdrawn ()

Mode of application of the flat-rate price procedure set forth in Recommendations D.67 and D.150 for remuneration of facilities made available to the Administrations of other countries

E.252 was an alias name of ITU-T D.160. Only this alias name was suppressed. ITU-T D.160 remains valid

Measuring and recording call durations for accounting purposes

**E.260 (11/88)** Basic technical problems concerning the measurement and recording of call durations

*Individually through the Electronic Bookshop:* 20 CHF

**E.261 (11/88)** Devices for measuring and recording call durations

*Individually through the Electronic Bookshop:* 20 CHF

#### E.270 (03/95) Withdrawn (02/98)

Monthly telephone and telex accounts

E.270 was an alias name of ITU-T D.170. Only this alias name was suppressed. ITU-T D.170 remains valid

#### E.275 (09/95) Withdrawn (02/98)

Exchange of international traffic accounting data between Administrations using electronic data interchange (EDI) techniques

E.275 was an alias name of ITU-T D.190. Only this alias name was suppressed. ITU-T D.190 remains valid

#### E.276 (12/97) Withdrawn (02/98)

Transmission in encoded form of telephone reversed charge billing and accounting information

E.276 was an alias name of ITU-T D.176. Only this alias name was suppressed. ITU-T D.176 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### E.277 (11/88) Withdrawn (02/98)

Conventional transmission of information necessary for the collection of charges and the accounting regarding collect and credit card calls

E.277 was an alias name of ITU-T D.174. Only this alias name was suppressed. ITU-T D.174 remains valid

# Supplements to the Series E Recommendations relating to the operations of the international service

**E.300** Series Supplement 5 (10/84) 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

12pp E 21894 F 21894 S 21894 9 CHF

**E.300 Series Supplement 2 (01/94)** Various tones used in national networks

34pp E 5529 F 5528 S 5530 17 CHF

**E.300 Series Supplement 1 (11/88)** List of possible supplementary telephone services which may be offered to subscribers

*Individually through the Electronic Bookshop:* 20 CHF

**E.300 Series Supplement 4 (11/88)** Treatment of calls considered as terminating abnormally

Individually through the Electronic Bookshop: 20 CHF

## Utilization of the international telephone network for non-telephony applications

General

**E.300 (11/88)** Special uses of circuits normally employed for automatic telephone traffic

*Individually through the Electronic Bookshop:* 20 CHF

# Supplements to the Series E Recommendations relating to the operations of the international service

**E.300 Series Supplement 6 (11/88)** Preparation of information to customers travelling abroad

*Individually through the Electronic Bookshop:* 20 CHF

**E.300 Series Supplement 7 (11/88)** Description of INMARSAT existing and planned systems

*Individually through the Electronic Bookshop:* 20 CHF

**E.300 Series Supplement 3 (11/88)** North american precise audible tone plan

*Individually through the Electronic Bookshop:* 20 CHF

#### General

**E.301 (03/93)** Impact of non-voice applications on the telephone network

15pp E 5098 F 5097 S 5099 11 CHF

#### *Phototelegraphy*

**E.320 (11/88)** Speeding up the establishment and clearing of phototelegraph calls

*Individually through the Electronic Bookshop:* 20 CHF

**E.323 (11/88)** Rules for phototelegraph communications set up over circuits normally used for telephone traffic

This Recommendation is published under alias number F.82 which was subsequently renumbered as F.107

#### ISDN provisions concerning users

**E.330 (11/88)** User control of ISDN-supported services

*Individually through the Electronic Bookshop:* 20 CHF

**E.331 (10/91)** Minimum user-terminal interface for a human user entering address information into an ISDN terminal

6pp E 2341 F 2319 S 2363 7 CHF

E.333 (11/88) Man-machine interface

This Recommendation is published under alias number Z.323

#### International routing plan

E.350 (03/00) Dynamic Routing Interworking

48pp E 18048 F 18049 S 18050 22 CHF

**E.351 (03/00)** Routing of multimedia connections across TDM-, ATM-, and IP-based networks

52pp E 18266 F 18267 S 18268 29 CHF

**E.352 (03/00)** Routing guidelines for efficient routing methods

20pp E 18125 F 18126 S 18127 17 CHF

**E.353 (02/01)** Routing of calls when using international network routing addresses

16pp E 20924 F 20925 S 20926 12 CHF

**E.360.1 (05/02)** Framework for QoS routing and related traffic engineering methods for IP-, ATM-, and TDM-based multiservice networks

50pp E 23114 F 23115 S 23116 22 CHF

**E.360.2 (05/02)** QoS routing & related traffic engineering methods – Call routing & connection routing methods

37pp E 23095 F 23096 S 23097 22 CHF

**E.360.3 (05/02)** QoS routing & related traffic engineering methods – QoS resource management methods

38pp E 23067 F 23068 S 23069 22 CHF

**E.360.4 (05/02)** QoS routing & related traffic engineering methods – routing table management methods & requirements

32pp E 23021 F 23022 S 23023 17 CHF

**E.360.5 (05/02)** QoS routing and related traffic engineering methods – Transport routing methods To be published...

**E.360.6 (05/02)** QoS routing & related traffic engineering methods – capacity management methods

34pp E 23101 F 23102 S 23103 17 CHF

**E.360.7 (05/02)** QoS routing and related traffic engineering methods – Routing table management methods and requirements

20pp E 22966 F 22967 S 22968 12 CHF

ISDN provisions concerning users

**E.370 (02/01)** Service principles when public circuit-switched international telecommunication networks interwork with IP-based networks

16pp E 20602 F 20603 S 20604 12 CHF

#### **Network management**

International service statistics

**E.401 (11/88)** Statistics for the international telephone service (number of circuits in operation and volume of traffic)

*Individually through the Electronic Bookshop:* 20 CHF

International network management

**E.410 (03/98)** International network management – General information

12pp E 13256 F 13257 S 13258 12 CHF

**E.411 (03/00)** International network management – Operational guidance

28pp E 18195 F 18196 S 18197 17 CHF

E.411 Amendment 1 (03/01)

8pp E 20535 F 20536 S 20537 9 CHF

**E.412 (01/03)** Network management controls To be published...

E.413 (11/88) International network management – Planning

Individually through the Electronic Bookshop: 20 CHF

**E.414 (11/88)** International network management – Organization

Individually through the Electronic Bookshop: 20 CHF

**E.415 (08/91)** International network management guidance for common channel signalling system No. 7

7pp E 2336 F 2314 S 2358 10 CHF

**E.416 (03/00)** Network Management Principles and Functions for B-ISDN Traffic

16pp E 18109 F 18110 S 18111 12 CHF

**E.417 (02/01)** Framework for the network management of IP-Based networks

22pp E 20888 F 20889 S 20890 12 CHF

Checking the quality of the international telephone service

**E.420 (11/88)** Checking the quality of the international telephone service – General considerations

*Individually through the Electronic Bookshop:* 20 CHF

**E.421 (11/88)** Service quality observations on a statistical basis

Individually through the Electronic Bookshop: 20 CHF

**E.422 (02/96)** Observations on international outgoing telephone calls for quality of service

16pp E 7230 F 7232 S 7235 12 CHF

**E.423 (11/88)** Observations on traffic set up by operators

*Individually through the Electronic Bookshop:* 20 CHF

**E.424 (10/92)** Test calls

3pp E 3280 F 3279 S 3281 8 CHF

**E.425 (03/02)** Internal automatic observations

20pp E 22034 F 22035 S 22036 12 CHF

**E.426 (10/92)** General guide to the percentage of effective attempts which should be observed for international telephone calls

1pp E 3274 F 3273 S 3275 8 CHF

E.427 (11/88) Collection and statistical analysis of E.452 (03/93) Facsimile modem speed reductions special quality of service observation data for and transaction time measurements of customer difficulties in the E 4156 F 4155 S 4157 8 CHF 3pp international automatic service E.453 (08/94) Facsimile image quality as corrupted Individually through the Electronic Bookshop: 20 CHF by transmission-induced scan line errors E 5653 F 5652 S 5654 8 CHF E.428 (10/92) Connection retention **E.454 (10/96)** Transmission performance metrics 2pp E 3252 F 3251 S 3253 8 CHF based on Error Correction Mode (ECM) facsimile E 9914 F 9915 S 9916 12 CHF **E.430 (06/92)** Quality of service framework E.456 (03/98) Test transaction for facsimile E 2707 F 2706 S 2708 8 CHF 3pp transmission performance E 13259 F 13260 S 13261 9 CHF 8pp E.431 (06/92) Service quality assessment for connection set-up and release delays **E.457 (02/96)** Facsimile measurement methodologies E 7203 F 7204 S 7205 9 CHF 8pp E 2801 F 2763 S 2836 8 CHF 3pp E.458 (02/96) Figure of merit for facsimile E.432 (06/92) Connection quality transmission performance E 7033 F 7034 9 CHF E 2802 F 2764 S 2837 S 7035 5pp 8 CHF 4pp E.459 (03/98) Measurements and metrics for E.433 (06/92) Billing integrity characterizing facsimile transmission performance E 2803 F 2765 S 2838 8 CHF using non-intrusive techniques 3pp E 13009 F 13010 S 13011 12 CHF 16pp E.434 (06/92) Subscriber-to-subscriber measurement E.460 (03/00) Measurements and metrics for of the public switched telephone network monitoring the performance of V.34 Group 3 E 2814 F 2779 S 2849 11 CHF 8pp facsimile 12pp E 18198 F 18199 S 18200 12 CHF E.436 (03/98) Customer Affecting Incidents and blocking Defects Per Million Traffic engineering 9 CHF E 12970 F 12971 S 12972 8pp Measurement and recording of traffic E.437 (05/99) Comparative metrics for network E.490 (06/92) Traffic measurement and evaluation – performance management General survey S 2839 8 CHF E 15974 F 15975 S 15976 12 CHF 5pp E 2804 F 2766 12pp E.490.1 (01/03) Overview of Recommendations on **E.438 (03/00)** Performance parameters and traffic engineering measurement methods to assess N-ISDN 64 kbit/s To be published... circuit switched bearer service UDI in operation **E.491 (05/97)** Traffic measurement by destination E 18643 F 18644 S 18645 12 CHF 12pp S 11801 E 11799 F 11800 9 CHF E.439 (03/00) Test call measurement to assess E.492 (02/96) Traffic reference period N-ISDN 64 kbit/s circuit-switched bearer service E 7108 F 7109 S 7110 9 CHF 8pp UDI in operation E.493 (02/96) Grade of service (GOS) monitoring E 18598 F 18599 S 18600 17 CHF 20pp E 7308 F 7309 S 7310 12 CHF 16pp E.440 (02/96) Customer satisfaction point E.500 (11/98) Traffic intensity measurement E 7030 F 7031 S 7032 9 CHF 4pp principles E 14598 F 14599 S 14600 16pp 12 CHF **E.450 (03/98)** Facsimile quality of service on public **E.501 (05/97)** Estimation of traffic offered in the networks – General aspects network E 13113 F 13114 S 13115 9 CHF 8pp E 11973 F 11974 S 11975 28pp 17 CHF E.502 (02/01) Traffic measurement requirements for E.451 (02/01) Facsimile call cut-off performance digital telecommunication exchanges E 20921 F 20922 S 20923 9 CHF 8pp E 21411 F 21412 S 21413 17 CHF 34pp

E.503 (06/92)			nent data ana		e.525 (06/9) of service	, .	ning netwo	rks to contro	l grade
6рр	E 2813	F 2775	S 2848	8 CHF	7pp	E 2816	F 2781	S 2851	11 CHF
E.504 (11/88)	Traffic	e measurer	nent adminis	tration					
Individually	through th	e Electronio	c Bookshop:	20 CHF				circuit group o overflow in	
E.505 (06/92) common ch				ance of	5pp	E 4949	F 4948	S 4950	8 CHF
13pp	E 2815	F 2780	S 2850	11 CHF				a circuit grow verflow traff	
Forecasting	of traffic	C			16pp	E 18543	F 18544	S 18545	12 CHF
E.506 (06/92) Forecasting international traffic					E.528 (02/96) Dimensioning of digital circuit multiplication equipment (DCME) systems				
19pp	E 2818	F 2783	S 2853	15 CHF	20pp	E 7311	F 7312	S 7313	17 CHF
E.507 (11/88) traffic	) Model	s for forec	asting interna	ntional	E.529 (05/9 end-to-end	7) Netwo		oning using	
Individually	through th	e Electronic	c Bookshop:	20 CHF	40pp	E 11997	F 11998	S 11999	22 CHF
E.508 (10/92) services	Foreca	asting new	telecommun	ication	Grade of se	ervice			
20pp	E 3386	F 3385	S 3387	15 CHF				service of the	
Determination	on of the	number o	of circuits in	manual	<i>Individuall</i>	y through th	e Electronic	Bookshop:	20 CHF
operation	v				E.541 (11/8 internation			service for criber-to-sub	scriber)
E.510 (11/88) Withdrawn (09/02)  Determination of the number of circuits in manual operation  This Recommendation was deleted since it has not been			nanual		y through th	,		20 CHF	
			ot been	E.543 (11/88) Grades of service in digital international telephone exchanges					
updated since 1988 and is no longer of interest				Individuall	y through th	e Electronic	Bookshop:	20 CHF	
Individually	through th	e Electronio	c Bookshop:	20 CHF	E.550 (03/9				
Determination of the number of circuits in automatic and semi-automatic operation			!	performance criteria under failure conditions in international telephone exchanges					
automatic ar	iu semi-	ишотинс	operation		9рр	E 5074	F 5073	S 5075	11 CHF
E.520 (11/88) automatic a overflow fa	nd/or sen		its to be prove operation, v		Definitions	•			
Individually		e Electronic	c Bookshop:	20 CHF	E.600 (03/9) engineerin	,	and defini	tions of traff	ic
E.521 (11/88) in a group of				circuits	16pp	E 4162	F 4161	S 4163	15 CHF
Individually				20 CHF	Traffic eng	ineering f	or IP-netv	vorks	
E.522 (11/88) group	) Numb	er of circui	its in a high-ı	ısage		0) Refereng of IP acc		ctions for tra ks	ffic
Individually	through th	e Electronic	c Bookshop:	20 CHF	12pp	E 18201	F 18202	S 18203	12 CHF
E.523 (11/88) international			profiles for			rnet telepho		lay in PSTN ortion of the	/ISDN
Individually	through th	e Electronic	c Bookshop:	20 CHF	12pp	E 18128	F 18129	S 18130	12 CHF
E.524 (05/99) Overflow approximations for non-random inputs					E.681 (10/01) Traffic engineering methods for IP access networks based on hybrid fiber/coax system				
16pp	E 16094	F 16095	S 16096	12 CHF	18pp	E 22458	F 22459	S 22460	12 CHF

E.503 (06/92) Traffic measurement data analysis

**E.525 (06/92)** Designing networks to control grade

ISDN traffic	enginee	ring			E.733 (11/9 Signalling	8) Metho System No			sources in
E.700 (10/92) Framework of the E.700-Series Recommendations			20рр		F 14640	S 14641	17 CHF		
1pp	E 3310	F 3309	S 3311	8 CHF	E.734 (10/9			cating and rk (IN) reso	urces
E.701 (10/92 engineering	•	ence conne	ctions for tra	ffic	28pp	E 9859	F 9860	S 9861	17 CHF
2pp	E 3289	F 3288	S 3290	8 CHF	E.735 (05/9			affic contro	l and
E.710 (10/92 ISDN traffi		hdrawn (1 ng overvie			dimension 32pp	ning in B-IS E 11985	SDN F 11986	S 11987	17 CHF
Deleted after	r its conten	t became te	chnically out o	of date	3 <b>2</b> pp	L 11705	1 11700	5 11707	17 0111
E.711 (10/92) User demand modelling				E.736 (03/0 B-ISDN	0) Metho	ds for cell	level traffic	control in	
9рр	E 3323	F 3322	S 3324	11 CHF	36pp	E 18649	F 18650	S 18651	22 CHF
E.712 (10/92	) User p	lane traffic	modelling		E 525 (02/0	1) D:		41 1 C D	ICDM
14pp	E 3313	F 3312	S 3314	11 CHF	E.737 (02/0	I) Dimen	_		
					46pp	E 21020	F 21021	S 21022	22 CHF
E.713 (10/92) Control plane traffic modelling  Only the title changes			g	E.743 (04/95) Traffic measurements for SS No. 7					
8pp	E 3389	F 3388	S 3390	8 CHF		ning and pla	•		
F 714 (10/04	) Haand	amand ma	dalling in		3pp	E 6004	F 6003	S 6005	8 CHF
E.716 (10/96 Broadband		emand mo	dening in		E.744 (10/9	6) Traffic	and conge	estion contro	1
16pp	E 9917	F 9918	S 9919	12 CHF				N-structure	
E.720 (11/88	) ISDN	grade of se	ervice concep	ot	16pp	E 9920	F 9921	S 9922	12 CHF
Individually	through th	e Electronic	Bookshop:	20 CHF	торр	L //20	1 //21	5 7722	12 0111
E.721 (05/99) Network grade of service parameters			ameters	<b>E.745 (03/00)</b> Cell level measurement requirements for the B-ISDN					
and target very evolving IS		circuit-sw	itched servic	es in the	20pp	E 18646	F 18647	S 18648	17 CHF
12pp	E 16014	F 16015	S 16016	12 CHF	Mobile net	work traff	ic enginee	ring	
E.723 (06/92	) Grade-	-of-service	parameters 1	for	1,100,000	,, 0.11 0.099		8	
Signalling	System N	o. 7 netwo	rks		E.750 (03/0				
5рр	E 2820	F 2785	S 2855	8 CHF	Recommendations on traffic engineering aspects networks supporting personnal communications				
<b>E.724 (02/96</b> objectives to			and target G	OS	services 16pp	E 18546	F 18547	S 18548	12 CHF
12pp	E 7154	F 7155	S 7156	12 CHF	TOPP	2 100 10	1 100 1,	5 100 10	12 0111
E.726 (03/00) Network grade of service parameters and target values for B-ISDN			ameters	<b>E.751 (02/96)</b> Reference connections for traffic engineering of land mobile networks					
20pp	E 18275	F 18276	S 18277	17 CHF	12pp	E 7206	F 7207	S 7208	12 CHF
E.728 (03/98) Grade-of-service parameters for B-ISDN signalling			for	<b>E.752 (10/96)</b> Reference connections for traffic engineering of maritime and aeronautical systems					
12pp	E 13002	F 13003	S 13004	12 CHF	20pp	E 10015	F 10016	S 10017	17 CHF
E.730 (10/92) Withdrawn (10/96) ISDN dimensioning methods overview				E.755 (02/96) Reference connections for UPT traffic performance and GOS					
	_		chnically out o	of date	8pp	E 7036	F 7037	S 7038	9 CHF
F = 24 (4.0.10.0)	N. N. C. I	1 C 1:			орр	F 1030	1 /03/	5 7030	) CIII

E.760 (03/00) Terminal mobility traffic modelling

E 18390 F 18391 S 18392

17 CHF

20pp

operating in circuit-switched mode

E 3429 F 3428

10pp

E.731 (10/92) Methods for dimensioning resources

S 3430

11 CHF

**E.770 (03/93)** Land mobile and fixed network interconnection traffic grade of service concept

3pp E 4308 F 4307 S 4309 8 CHF

**E.771 (10/96)** Network grade of service parameters and target values for circuit-switched public land mobile services

20pp E 9923 F 9924 S 9925 17 CHF

**E.773** (10/96) Maritime and aeronautical mobile grade of service concept

8pp E 9862 F 9863 S 9864 9 CHF

**E.774 (10/96)** Network grade of service parameters and target values for maritime and aeronautical mobile services

12pp E 9865 F 9866 S 9867 12 CHF

E.775 (02/96) UPT grade of service concept

8pp E 7104 F 7105 S 7106 9 CHF

**E.776 (10/96)** Network grade of service parameters for UPT

8pp E 9868 F 9869 S 9870 9 CHF

Quality of telecommunication services: concepts, models, objectives and dependability planning

Terms and definitions related to the quality of telecommunication services

**E.800 (08/94)** Terms and definitions related to quality of service and network performance including dependability

53pp E 5867 F 5866 S 5868 20 CHF

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

**E.800 Series Supplement 2 (11/88)** Curves showing the relation between the traffic offered and the number of circuits required

*Individually through the Electronic Bookshop:* 20 CHF

**E.800 Series Supplement 5 (11/88)** Teletraffic implications for international switching and operational procedures resulting from a failure of a transmission facility

*Individually through the Electronic Bookshop:* 20 CHF

**E.800 Series Supplement 7 (11/88)** Guide for evaluating and implementing alternate routing networks

*Individually through the Electronic Bookshop:* 20 CHF

**E.800 Series Supplement 1 (11/88)** Table of the Erlang formula

*Individually through the Electronic Bookshop:* 20 CHF

Terms and definitions related to the quality of telecommunication services

**E.801 (10/96)** Framework for service quality agreement

20pp E 9982 F 9983 S 9984 17 CHF

Models for telecommunication services

**E.810 (10/92)** Framework of the Recommendations on the serveability performance and service integrity for telecommunication services

2pp E 3326 F 3325 S 3327 8 CHF

**E.820 (10/92)** Call models for serveability and service integrity performance

9pp E 3329 F 3328 S 3330 8 CHF

**E.830 (10/92)** Models for the specification, evaluation and allocation of serveability and service integrity

3pp E 3304 F 3303 S 3305 8 CHF

Objectives for quality of service and related concepts of telecommunication services

**E.845 (11/88)** Connection accessibility objective for the international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

**E.846 (03/93)** Accessibility for 64 kbit/s circuit-switched international end-to-end ISDN connection types

6pp E 5077 F 5076 S 5078 8 CHF

**E.850 (10/92)** Connection retainability objective for the international telephone service

5pp E 3316 F 3315 S 3317 8 CHF

**E.855 (11/88)** Connection integrity objective for the international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

Use of quality of service objectives for planning of telecommunication networks

**E.860 (06/02)** Framework of a service level agreement

To be published...

**E.862 (06/92)** Dependability planning of telecommunication networks

13pp E 2821 F 2786 S 2856 11 CHF

Field data collection and evaluation on the performance of equipment, networks and services

**E.880 (11/88)** Field data collection and evaluation on the performance of equipment, networks and services *Individually through the Electronic Bookshop:* 20 CHF

#### SERIES F

# Non-telephone telecommunication services

#### Telegraph service

Operating methods for the international public telegram service

**F.1 (03/98)** Operational provisions for the international public telegram service

64pp E 13031 F 13032 S 13033 29 CHF

**F.2 (11/88)** Operational provisions for the collection of telegram charges

Published as F.42 (11/88), then renumbered as F.2
Individually through the Electronic Bookshop: 20 CHF

F.4 (11/88) Plain and secret language

*Individually through the Electronic Bookshop:* 20 CHF

**F.10 (11/88)** Character error rate objective for telegraph communication using 5-unit start-stop equipment

*Individually through the Electronic Bookshop:* 20 CHF

**F.11 (10/91)** Continued availability of traditional services

2pp E 2347 F 2325 S 2369 7 CHF

F.12 (03/93) Withdrawn (10/00)

Major degradation or disruption of service

This Recommendation is published under alias number A.30

This Recommendation was published under alias number A.30, which was deleted and transfered to ITU-T C.2

F.13 (11/88) Withdrawn (07/96)

Operational provisions for participation in the transferred account telegraph and telematic service

Published as F.41 (11/88), then renumbered as F.13. It was deleted after the withdrawal of the transferred account telegraph and telematic service

*Individually through the Electronic Bookshop:* 20 CHF

**F.14 (08/92)** General provisions for one-stop-shopping arrangements

2pp E 2878 F 2870 S 2886 8 CHF

**F.15 (08/92)** Evaluating the success of new services 2pp E 2880 F 2872 S 2888 8 CHF

F.16 (02/95) Global virtual network service

19pp E 5973 F 5972 S 5974 15 CHF

**F.17 (08/92)** Operational aspects of service telecommunications

2pp E 2881 F 2873 S 2889 8 CHF

**F.18 (03/98)** Guidelines on harmonization of international public bureau services

12pp E 13073 F 13074 S 13075 12 CHF

**F.19 (01/96)** Collection and dissemination of official serviceinformation

10pp E 22741 F 22741 S 22741 9 CHF

**F.19 (01/02)** Collection and dissemination of official service information

Formerly C.2, renumbered as F.19 on 25/01/2002 without further modification

The gentex network

**F.20 (11/88)** The international gentex service *Individually through the Electronic Bookshop:* 20 CHF

**F.21 (11/88)** Composition of answer-back codes for the international gentex service

*Individually through the Electronic Bookshop:* 20 CHF

**F.23 (11/88)** Grade of service for long-distance international gentex circuits

Individually through the Electronic Bookshop: 20 CHF

**F.24 (11/88)** Average grade of service from country to country in the gentex service

*Individually through the Electronic Bookshop:* 20 CHF

Message switching

**F.30 (03/93)** Use of various sequences of combinations for special purposes

2pp E 3732 F 3731 S 3733 8 CHF

F.31 (11/88) Telegram retransmission system

*Individually through the Electronic Bookshop:* 20 CHF

**F.32 (10/95)** Telegram destination indicators Formerly Rec. F.96. E 6438 F 6439 S 6440 8 CHF 8pp **F.35 (11/88)** Provisions applying to the operation of an international public automatic message switching service for equipments utilizing the international telegraph Alphabet No. 2 Individually through the Electronic Bookshop: 20 CHF The international telemessage service **F.40 (03/91)** International public telemessage service Formerly Rec. F.50. E 1954 F 1953 S 1955 10 CHF 10pp **F.41 (03/91)** Interworking between the telemessage service and the international public telegram service Formerly Rec. F.51. 2pp E 1963 F 1962 S 1964 7 CHF The international telex service F.59 (10/96) General characteristics of the international telex service E 10889 F 10890 S 10891 12 CHF **F.60 (08/92)** Operational provisions for the international telex service E 3009 31pp F 3002 S 3016 15 CHF F.61 (11/88) Operational provisions relating to the chargeable duration of a telex call Individually through the Electronic Bookshop: 20 CHF F.63 (03/93) Additional facilities in the international telex service 2pp E 3748 F 3747 S 3749 8 CHF **F.64 (11/88)** Determination of the number of international telex circuits required to carry a given volume of traffic Individually through the Electronic Bookshop: 20 CHF F.65 (11/88) Time-to-answer by operators at international telex positions Individually through the Electronic Bookshop: 20 CHF F.68 (11/88) Establishment of the automatic intercontinental telex network Individually through the Electronic Bookshop: 20 CHF **F.69 (06/94)** The international telex service – Service and operational provisions of telex destination codes and telex network identification codes E 5456 F 5455 S 5457 8 CHF

**F.70 (11/88)** Evaluating the quality of the

Individually through the Electronic Bookshop:

20 CHF

international telex service

**F.71 (11/88)** Interconnection of private teleprinter networks with the telex network

*Individually through the Electronic Bookshop:* 20 CHF

**F.72 (10/96)** The international telex service – General principles and operational aspects of a store and forward facility

20pp E 11009 F 11010 S 11011 17 CHF

**F.73 (07/90)** Operational principles for communication between terminals of the international telex service and data terminal equipment on packet-switched public data networks

Corr. 12/90

6pp E 1887 F 1886 S 1888 7 CHF

**F.74 (08/92)** Intermediate storage devices accessed from the international telex service using single stage selection – Answerback format

2pp E 2876 F 2868 S 2884 8 CHF

**F.80 (10/91)** Basic requirements for interworking relations between the international telex service and other services

3pp E 2348 F 2326 S 2370 7 CHF

**F.82 (10/91)** Operational provisions to permit interworking between the international telex service and the intex service

2pp E 2345 F 2323 S 2367 7 CHF

**F.83 (07/90)** Operational principles for communication between terminals of the international telex service and data terminal equipment on packet-switched public data networks

Published as F.73, then renumbered as F.83. A Corrigendum was indicated in 12/1990.

6pp E 1887 F 1886 S 1888 7 CHF

**F.85 (11/88)** Message handling services – Intercommunication between the IPM service and the telex service

This Recommendation was renumbered from F.75, and is published under alias number F.421

Covering note, December 1999: Intercommunication between the IPM service and the telex service.

*Individually through the Electronic Bookshop:* 20 CHF

**F.86 (10/91)** Interworking between the international telex service and the videotex service

6pp E 2350 F 2328 S 2372 7 CHF

**F.87 (03/91)** 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

Drafted as F.76, then renumbered and published as F.87.

9pp E 1966 F 1965 S 1967 10 CHF

**F.89 (08/92)** Status enquiry function in the international telex service

4pp E 2877 F 2869 S 2885 8 CHF

Statistics and publications on international telegraph services

#### F.91 (11/88) Withdrawn (07/96)

General statistics for the telegraph services

Deleted as a consequence of the abolishion of a number of service documents

*Individually through the Electronic Bookshop:* 20 CHF

#### F.92 (11/88) Withdrawn (07/96)

Service codes

The content of this Recommendation is now covered by ITU-T F.32

*Individually through the Electronic Bookshop:* 20 CHF

#### F.93 (11/88) Withdrawn (07/96)

Routing table for offices connected to the gentex service

Deleted as a consequence of the abolishion of a number of service documents

Individually through the Electronic Bookshop: 20 CHF

#### F.95 (11/88) Withdrawn (07/96)

Table of international telex relations and traffic

Deleted as a consequence of the abolishion of a number of service documents

Individually through the Electronic Bookshop: 20 CHF

Scheduled and leased communication services

## **F.100 (11/88)** Scheduled radiocommunication service

*Individually through the Electronic Bookshop:* 20 CHF

**F.104 (10/91)** International leased circuit services – customer circuit designations

2pp E 2342 F 2320 S 2364 7 CHF

#### Phototelegraph service

## **F.105 (11/88)** Operational provisions for phototelegrams

Published as F.80 (11/88), then renumbered as F.105.

Individually through the Electronic Bookshop: 20 CHF

**F.106 (11/88)** Operational provisions for private phototelegraph calls

Published as F.80 bis (11/88), then renumbered as F.106.
Individually through the Electronic Bookshop: 20 CHF

**F.107 (11/88)** Rules for phototelegraph established calls over circuits normally used for telephone traffic

Published as F.82 (11/88), then renumbered as F.107. This Recommendation is also included but not published in E series under alias number E.323.

*Individually through the Electronic Bookshop:* 20 CHF

**F.108 (11/88)** Operating rules for international phototelegraph calls to multiple destinations

Published as F.85 (11/88), then renumbered as F.108.

Individually through the Electronic Bookshop: 20 CHF

#### **Mobile service**

Mobile services and multidestination satellite services

**F.110 (07/96)** Operational provisions for the maritime mobile service

The date of entry into effect of this Recommendation edition is 1 January 1997.

24pp E 9562 F 9563 S 9564 17 CHF

**F.111 (03/91)** Principles of service for mobile systems

2pp E 1969 F 1968 S 1970 7 CHF

**F.112 (11/88)** Quality objectives for 50-baud start-stop telegraph transmission in the maritime mobile-satellite service

*Individually through the Electronic Bookshop:* 20 CHF

**F.113 (08/92)** Service provisions for aeronautical passenger communications supported by mobile-satellite systems

3pp E 2879 F 2871 S 2887 8 CHF

**F.115 (02/95)** Service objectives and principles for future public land mobile telecommunication systems

9pp E 5967 F 5966 S 5968 11 CHF

**F.116 (03/00)** Service features and operational provisions in IMT-2000

16pp E 18042 F 18043 S 18044 12 CHF

**F.120 (11/88)** Ship station identification for VHF/UHF and maritime mobile-satellite services

This Recommendation is also published under alias number E.210

*Individually through the Electronic Bookshop:* 20 CHF

**F.122 (11/88)** Operational procedures for the maritime satellite data transmission service

*Individually through the Electronic Bookshop:* 20 CHF

**F.125 (08/93)** Numbering plan for access to the mobile-satellite services of INMARSAT from the international telex service

8pp E 4496 F 4495 S 4497 11 CHF

**F.127 (10/96)** Operational procedures for interworking between the international telex service and the service offered by the INMARSAT-C system

8pp E 10801 F 10802 S 10803 9 CHF

F.130 (11/88) Maritime answer-back codes

Individually through the Electronic Bookshop: 20 CHF

F.131 (11/88) Radiotelex service codes

*Individually through the Electronic Bookshop:* 20 CHF

**F.140 (03/93)** Point-to-multipoint telecommunication service via satellite

4pp E 3862 F 3861 S 3863 8 CHF

**F.141 (06/94)** International two-way multipoint telecommunication service via satellite

3pp E 5468 F 5467 S 5469 8 CHF

**F.150 (10/91)** Service and operational provisions for the Intex service

4pp E 2349 F 2327 S 2371 7 CHF

#### **Telematic services**

Public facsimile service

#### F.160 (03/93) Withdrawn (07/99)

General operational provisions for the international public facsimile services

Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services

5pp E 3672 F 3671 S 3673 8 CHF

**F.162 (07/96)** Service and operational requirements of store-and-forward facsimile service

12pp E 9565 F 9566 S 9567 12 CHF

**F.163 (07/96)** Operational requirements of the interconnection of facsimile store-and-forward units

12pp E 9651 F 9652 S 9653 12 CHF

#### F.166 (07/96) Withdrawn (07/99)

Service and operational requirements for a fax database service (FaxDB)

Deleted as there are no plans for the introduction of a service of this nature

8pp E 7275 F 7276 S 7277 9 CHF

**F.170 (03/98)** Operational provisions for the international public facsimile service between public bureaux (Bureaufax)

12pp E 13034 F 13035 S 13036 12 CHF

**F.171 (11/88)** Operational provisions relating to the use of store-and-forward switching nodes within the bureaufax service

*Individually through the Electronic Bookshop:* 20 CHF

#### F.180 (10/96) Withdrawn (07/99)

General operational provisions for the international public facsimile service between subscribers' terminals (Telefax)

Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services

12pp E 10771 F 10772 S 10773 12 CHF

**F.182bis (10/96)** Guidelines for the support of the communication of documents using Group 3 facsimile between user terminals via public networks

8pp E 10777 F 10778 S 10779 9 CHF

#### F.182 (10/96) Withdrawn (07/99)

Operational provisions for the international public facsimile service between subscribers with Group 3 facsimile terminals (Telefax 3)

Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services

8pp E 10774 F 10775 S 10776 9 CHF

#### F.184 (07/96) Withdrawn (07/99)

Operational provisions for the international public facsimile service between subscriber stations with group 4 facsimile terminals (telefax 4)

Deleted as a result of liberalisation in the telecommunications environment resulting in the removal of international regulated services

16pp E 7487 F 7488 S 7489 12 CHF

**F.185 (06/98)** Internet facsimile: Guidelines for the support of the communication of facsimile documents

8pp E 13964 F 13965 S 13966 9 CHF

**F.190 (08/92)** Operational provisions for the international facsimile service between public bureaux and subscriber stations and vice versa (bureaufax-telefax and vice versa)

3pp E 2989 F 2982 S 2996 8 CHF

Teletex service

#### F.200 (08/92) Withdrawn (07/96)

Teletex service

Deleted as a consequence of the suppression of Teletex service

#### F.201 (03/93) Withdrawn (07/96)

Interworking between teletex service and telex service – General principles

Deleted as a consequence of the suppression of Teletex service

#### F.202 (11/88) Withdrawn (07/96)

Interworking between the telex service and the teletex service – General procedures and operational requirements for the international interconnection of telex/teletex conversion facilities

Deleted as a consequence of the suppression of Teletex service

*Individually through the Electronic Bookshop:* 20 CHF

#### F.203 (11/88) Withdrawn (07/96)

Network based storage for the teletex service

Deleted as a consequence of the suppression of Teletex service

*Individually through the Electronic Bookshop:* 20 CHF

#### F.220 (03/93) Withdrawn (07/96)

Service requirements unique to the processable mode number eleven (PM11) used within the teletex service

Deleted as a consequence of the suppression of Teletex service

#### F.230 (11/88) Withdrawn (07/96)

Service requirements unique to the mixed mode (MM) used within the teletex service

Deleted as a consequence of the suppression of Teletex service

*Individually through the Electronic Bookshop:* 20 CHF

Videotex service

**F.300 (03/93)** Videotex service

30pp E 4029 F 4028 S 4030 20 CHF

F.301 (10/95) Fast speed PSTN videotex

8pp E 6645 F 6646 S 6647 8 CHF

General provisions for telematic services

**F.350 (11/88)** Application of Series T Recommendations

*Individually through the Electronic Bookshop:* 20 CHF

**F.351 (11/88)** General principles on the presentation of terminal identification to users of the telematic services

*Individually through the Electronic Bookshop:* 20 CHF

**F.353 (11/88)** Provision of telematic and data transmission services on integrated services digital network (ISDN)

*Individually through the Electronic Bookshop:* 20 CHF

#### Message handling services

**F.400/X.400 (06/99)** Message handling services: Message handling system and service overview *Available as a prepublished version* 

To be published...

**F.401 (08/92)** Message handling services: Naming and addressing for public message handling services

19pp E 3077 F 3076 S 3078 15 CHF

**F.410 (08/92)** Message handling system: The public message transfer service

9pp E 3061 F 3060 S 3062 11 CHF

F.415 (11/88) Message handling system:

Intercommunication with public physical delivery services

Erratum in F.410 (08/92)

*Individually through the Electronic Bookshop:* 20 CHF

**F.420 (08/92)** Message handling system: The public interpersonal messaging service

14pp E 3071 F 3070 S 3072 11 CHF

**F.421 Errata (12/99)** Errata to Recommendation F.421 (11/88)

**F.421 (11/88)** Intercommunication between the IPM service and the telex service

This Recommendation is also included but not published in F series under alias number F.85.

Covering note, December 1999: Intercommunication between the IPM service and the telex service.

*Individually through the Electronic Bookshop:* 20 CHF

#### F.422 (11/88) Withdrawn (07/96)

Message handling services: Intercommunication between the IPM service and the teletex service

Deleted as a consequence of the suppression of Teletex service

*Individually through the Electronic Bookshop:* 20 CHF

**F.423 (08/92)** Message handling system:

Intercommunication between the interpersonal messaging service and the telefax service

6pp E 3064 F 3063 S 3065 8 CHF

**F.435 (06/99)** Message handling services: Electronic F.701 (11/00) Guideline Recommendation for Data Interchange messaging service identifying multimedia service requirements E 17675 F 17676 S 17677 **29 CHF** S 18735 56pp E 18733 F 18734 12 CHF 12pp **F.440 (08/92)** Message handling services: The voice F.701 (11/88) Withdrawn (05/98) messaging service Teleconference service E 3080 F 3079 S 3081 20 CHF 32pp This Recommendation was published as F.710 (11/88), then renumbered as F.701. Its content is superseded by ITU-T F.702 on multimedia F.471 (08/97) Operational requirements for the interconnection of voice-mail store-and-forward Individually through the Electronic Bookshop: 20 CHF units E 11952 F 11953 S 11954 16pp 12 CHF F.702 (07/96) Multimedia conference services E 9771 F 9772 S 9773 17 CHF 32pp F.471 Corrigendum 1 (09/98) F.703 (11/00) Multimedia conversational services **F.472 (08/97)** Service and operational requirements E 18874 F 18875 S 18876 20pp 17 CHF of the voice-mail store-and-forward service E 11926 F 11927 S 11928 16pp 12 CHF F.710 (03/91) Withdrawn (05/98) General principles for audiographic conference **Directory services** The content of this Recommendation is superseded by F.500 (08/92) International public directory services ITU-T F.702 on multimedia E 3192 F 3191 37pp S 3193 20 CHF E 1997 F 1996 S 1998 10 CHF 12pp **F.510 (02/03)** Automated directory assistance – F.711 (08/93) Withdrawn (05/98) White pages service definition Audiographic conference teleservice for ISDN To be published The content of this Recommendation is superseded by ITU-T F.731 on multimedia **Document communication** E 4686 F 4685 S 4687 11 CHF 8pp F.551 (03/93) Withdrawn (05/00) F.720 (08/92) Videotelephony services – General Service Recommendation for the telematic file E 3133 F 3132 S 3134 11 CHF 9pp transfer within telefax 3, telefax 4, teletex services and message handling services F.721 (08/92) Videotelephony teleservice for ISDN This Recommendation is no longer needed since the F 3114 E 3115 S 3116 11 CHF characteristics of the file transfer capabilities are fully 10pp described in ITU-T T.434 (BFT) **F.723 (07/96)** Videophone service in the Public E 3723 F 3722 S 3724 8 CHF Switched Telephone Network (PSTN) E 7447 F 7448 S 7449 9 CHF Programming communication interfaces F.730 (08/92) Withdrawn (05/98) **F.581 (03/93)** Guidelines for programming Videoconference service - General communication interfaces (PCIs) definition: service Recommendation The content of this Recommendation is superseded by ITU-T F.702 on multimedia E 3977 F 3976 S 3978 11 CHF 8pp E 3124 F 3123 S 3125 11 CHF 14pp **Data transmission services F.731 (07/97)** Multimedia Conference Services in the **ISDN F.600 (09/98)** Service and operational principles for public data transmission service E 11815 F 11816 S 11817 12 CHF 12pp 12pp E 14601 F 14602 S 14603 12 CHF F.732 (10/96) Multimedia conference services in the **B-ISDN Audiovisual services** E 11073 F 11074 S 11075 28pp 17 CHF

F.700 (11/00) Framework Recommendation for

F 18502

S 18503

**29 CHF** 

multimedia services

E 18501

56pp

S 4690

F.740 (08/93) Audiovisual interactive services

F 4688

E 4689

9pp

11 CHF

**F.761 (11/88)** Service-oriented requirements for telewriting applications

Published as F.730 (11/88), then renumbered as F.761.

*Individually through the Electronic Bookshop:* 20 CHF

#### **ISDN** services

**F.811 (07/96)** Broadband connection-oriented bearer service

24pp E 9752 F 9753 S 9754 22 CHF

**F.812 (08/92)** Broadband connectionless data bearer service

6pp E 3136 F 3135 S 3137 8 CHF

**F.813 (02/95)** Virtual path service for reserved and permanent communications

13pp E 5998 F 5997 S 5999 11 CHF

#### Universal personal telecommunication

**F.850 (03/93)** Principles of universal personal telecommunication (UPT)

2pp E 3681 F 3680 S 3682 8 CHF

**F.851 (02/95)** Universal Personal Telecommunication (UPT) – Service description (service set 1)

27pp E 6022 F 6021 S 6023 15 CHF

**F.852 (03/00)** Universal personal telecommunication (UPT) – Service description (service set 2)

44pp E 18624 F 18625 S 18626 22 CHF

**F.853 (11/98)** Supplementary services in the Universal Personal Telecommunication (UPT) environment

16pp E 14604 F 14605 S 14606 12 CHF

#### **Human factors**

**F.901 (03/93)** Usability evaluation of telecommunication services

5pp E 3735 F 3734 S 3736 8 CHF

**F.902 (02/95)** Interactive services design guidelines

5pp E 5876 F 5875 S 5877 8 CHF

**F.910 (02/95)** Procedures for designing, evaluating and selecting symbols, pictograms and icons

7pp E 5970 F 5969 S 5971 11 CHF

#### **Supplements to the Series F Recommendations**

**Suppl. 1 (11/88)** Definitions relating to telegraph, telematic and data transmission services

20 CHF

Suppl. 2 (11/88) Terms and definitions for telex

20 CHF

#### SERIES G

Transmission systems and media, digital systems and networks

## International telephone connections and circuits

General definitions

**G.100 (02/01)** Definitions used in Recommendations on general characteristics of international telephone connections and circuits

38pp E 21183 F 21184 S 21185 22 CHF

# **Supplements to Section 1 of the Series G Recommendations**

**G.100 Series Supplement 29 (03/93)** Planning of mixed analogue-digital circuits (chains, connections) 24pp E 4868 F 4867 S 4869 15 CHF

**G.100 Series Supplement 31 (03/93)** Principles of determining an impedance strategy for the local network

7pp E 4662 F 4661 S 4663 11 CHF

**G.100 Series Supplement 32 (03/93)** Transmission aspects of digital mobile radio systems

7pp E 4811 F 4810 S 4812 11 CHF

## International telephone connections and circuits

#### General definitions

**G.100.1 (11/01)** The use of the decibel and of relative levels in speechband telecommunications

36pp E 22417 F 22418 S 22419 17 CHF

**G.101 (08/96)** The transmission plan

40pp E 9926 F 9927 S 9928 22 CHF

**G.101 Appendix I (05/00)** A computational model for guidance in transmission planning

4pp E 19644 F 19645 S 19646 9 CHF

**G.102 (11/88)** Transmission performance objectives **G.116 (09/99)** Transmission performance objectives and Recommendations applicable to end-to-end international connections Individually through the Electronic Bookshop: 20 CHF 16pp E 17578 F 17579 S 17580 G.103 (12/98) Hypothetical reference connections **G.117 (02/96)** Transmission aspects of unbalance E 14645 F 14646 S 14647 17 CHF 20pp about earth G.105 (11/88) Hypothetical reference connection for 20pp E 7288 F 7290 S 7291 crosstalk studies Individually through the Electronic Bookshop: 20 CHF General characteristics of national systems forming part of international connections G.107 (07/02) The E-Model, a computational model for use in transmission planning 26pp E 22797 F 22798 S 22799 17 CHF **G.120 (12/98)** Transmission characteristics of national networks G.108 (09/99) Application of the E-model: A E 14677 F 14678 S 14679 planning guide 16pp Covering note, November 2000: Erratum G.121 (03/93) Loudness ratings (LRs) of national E 17913 F 17914 S 17915 55 CHF 140pp systems G.108 Erratum (12/00) Erratum to 13pp E 4656 F 4655 S 4657 Recommendation ITU-T G.108 (09/99) G.108.1 (05/00) Guidance for assessing G.122 (03/93) Influence of national systems on conversational speech transmission quality effects stability and talker echo in international connections not covered by the E-model 11pp E 4814 F 4813 S 4815 E 19424 F 19425 S 19426 20pp 17 CHF **Withdrawn (03/99)** G.123 (11/88) G.108.2 (01/03) Transmission planning aspects of Circuit noise in national networks echo cancellers To be published... The content of this Recommendation is now covered by ITU-T G.120 G.109 (09/99) Definition of categories of speech *Individually through the Electronic Bookshop:* transmission quality E 17587 F 17588 S 17589 9 CHF 8pp **Withdrawn (03/99)** G.125 (11/88) Characteristics of national circuits on carrier systems General Recommendations on the transmission quality for an entire international telephone The content of this Recommendation is now covered by connection ITU-T G.120 Individually through the Electronic Bookshop: G.111 (03/93) Loudness ratings (LRs) in an international connection **G.126 (03/93)** Listener echo in telephone networks E 4952 F 4951 S 4953 15 CHF 17pp E 4659 F 4658 S 4660 7pp G.113 (02/01) Transmission impairments due to speech processing Appendix I in G.113 was revised by 10/2001 version General characteristics of the 4-wire chain formed by the international circuits and national E 21034 F 21035 S 21036 17 CHF 26pp extension circuits G.113 Appendix I (05/02) Provisional planning values for the equipment impairment factor Ie and G.131 (08/96) Control of talker echo packet-loss robustness factor Bpl E 9871 F 9872 S 9873 12pp 10pp E 22649 F 22650 S 22651 9 CHF **G.114 (05/00)** One-way transmission time G.131 Appendix II (09/99) Relation between echo

E 19385 F 19386

G.115 (02/96) Mean active speech level for

E 7039

announcement and speech synthesis systems

F 7040

24pp

4pp

S 19387

S 7041

17 CHF

9 CHF

S 17606

disturbances under single talk and double talk conditions (evaluated for one-way transmission time

F 17605

E 17604

of 100 ms)

12pp

9 CHF

12 CHF

17 CHF

12 CHF

11 CHF

11 CHF

20 CHF

20 CHF

11 CHF

12 CHF

#### G.132 (11/88) Withdrawn (03/99)

Attenuation distortion

The content of this Recommendation is now covered by ITU-T G.120

Individually through the Electronic Bookshop: 20 CHF

#### G.133 (11/88) Withdrawn (03/99)

Group-delay distortion

The content of this Recommendation is now covered by ITU-T G.120

*Individually through the Electronic Bookshop:* 20 CHF

#### G.134 (11/88) Withdrawn (03/99)

Linear crosstalk

The content of this Recommendation is now covered by ITU-T G.120

*Individually through the Electronic Bookshop:* 20 CHF

#### G.135 (11/88) Withdrawn (03/99)

Error on the reconstituted frequency

The content of this Recommendation is now covered by ITU-T G.120

Individually through the Electronic Bookshop: 20 CHF

## **G.136 (09/99)** Application rules for automatic level control devices

Covering note, May 2000: Erratum

8pp E 17347 F 17348 S 17349 9 CHF

#### G.136 Erratum (12/00) Erratum to

Recommendation ITU-T G.136 (09/99)

General characteristics of the 4-wire chain of international circuits; international transit

#### G.141 (11/88) Withdrawn (03/99)

Attenuation distortion

The content of this Recommendation is now covered by ITU-T G.120

Individually through the Electronic Bookshop: 20 CHF

## **G.142 (12/98)** Transmission characteristics of exchanges

12pp E 14726 F 14728 S 14730 12 CHF

#### G.143 (11/88) Withdrawn (09/97)

Circuit noise and the use of compandors

Deleted because it deals with compandor transmission aspects, which use is no more recommended in networks

Individually through the Electronic Bookshop: 20 CHF

General characteristics of international telephone circuits and national extension circuits

#### G.151 (11/88) Withdrawn (03/99)

General performance objectives applicable to all modern international circuits and national extension circuits

*Individually through the Electronic Bookshop:* 20 CHF

#### G.152 (11/88) Withdrawn (03/99)

Characteristics appropriate to long-distance circuits of a length not exceeding 2500 km

*Individually through the Electronic Bookshop:* 20 CHF

#### G.153 (11/88) Withdrawn (03/99)

Characteristics appropriate to international circuits more than 2500 km in length

*Individually through the Electronic Bookshop:* 20 CHF

Apparatus associated with long-distance telephone circuits

# **G.161 (06/02)** Interaction aspects of signal processing network equipment

32pp E 22751 F 22752 S 22753 17 CHF

#### G.161 (10/76) Withdrawn (03/93)

Echo-suppressors suitable for circuits having either short or long propagation times

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.162 (11/88) Withdrawn (02/99)

Characteristics of compandors for telephony

*Individually through the Electronic Bookshop:* 20 CHF

#### G.163 (11/88) Withdrawn (03/93)

Call concentrating systems

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### **G.164 (11/88)** Echo suppressors

*Individually through the Electronic Bookshop:* 22 CHF

#### **G.165 (03/93)** Echo cancellers

27pp E 4246 F 4245 S 4247 20 CHF

#### G.166 (11/88) Withdrawn (02/99)

Characteristics of syllabic compandors for telephony on high capacity long distance systems

Deleted because it deals with compandor transmission aspects, which use is no more recommended in networks

*Individually through the Electronic Bookshop:* 20 CHF

#### G.167 (03/93) Acoustic echo controllers

16pp E 4108 F 4107 S 4109 15 CHF

G.168 (06/02) Digital network echo cancellers

To be published...

G.169 (07/99) Automatic level control devices

32pp E 16467 F 16468 S 16469 17 CHF

Transmission plan aspects of special circuits and connections using the international telephone connection network

#### G.171 (11/88) Withdrawn (01/00)

Transmission plan aspects of privately operated networks

Deleted because it refers to obsolete Recommendations. For guidance on transmission planning or on private/public network interconnection, refer to ITU-T G.175 and G.108

*Individually through the Electronic Bookshop:* 20 CHF

**G.172 (11/88)** Transmission plan aspects of international conference calls

*Individually through the Electronic Bookshop:* 20 CHF

**G.173 (03/93)** Transmission planning aspects of the speech service in digital public land mobile networks

18pp E 4871 F 4870 S 4872 15 CHF

**G.174 (06/94)** Transmission performance objectives for terrestrial digital wireless systems using portable terminals to access the PSTN

13pp E 5558 F 5557 S 5559 11 CHF

**G.175 (05/00)** Transmission planning for private/public network interconnection of voice traffic

20pp E 19394 F 19395 S 19396 17 CHF

**G.176 (04/97)** Planning guidelines for the integration of ATM technology into networks supporting voiceband services

16pp E 11720 F 11721 S 11722 12 CHF

**G.177 (09/99)** Transmission planning for voiceband services over hybrid Internet/PSTN connections

20pp E 17489 F 17490 S 17491 17 CHF

Protection and restoration of transmission systems

**G.180 (03/93)** Characteristics of N + M type direct transmission restoration systems for use on digital and analogue sections, links or equipment

12pp E 4090 F 4089 S 4091 11 CHF

**G.181 (03/93)** Characteristics of 1 + 1 type restoration systems for use on digital transmission links

3pp E 4005 F 4004 S 4006 8 CHF

Software tools for transmission systems

**G.191 (11/00)** Software tools for speech and audio coding standardization

This Recommendation includes 1 CD-ROM containing the software tools library (STL-2000)). The STL-2000 Manual is freely available from this Website for information purpose.

16pp E 20702 F 20703 S 20704 62 CHF

**G.192 (03/96)** A common digital parallel interface for speech standardisation activities

20pp E 6825 F 6826 S 6827 17 CHF

# General characteristics common to all analogue carrier-transmission systems

Definitions and general considerations

G.211 (11/88) Make-up of a carrier link

Individually through the Electronic Bookshop: 20 CHF

**G.212 (11/88)** Hypothetical reference circuits for analogue systems

Individually through the Electronic Bookshop: 20 CHF

**G.213 (11/88)** Interconnection of systems in a main repeater station

*Individually through the Electronic Bookshop:* 20 CHF

**G.214 (11/88)** Line stability of cable systems

*Individually through the Electronic Bookshop:* 20 CHF

**G.215 (11/88)** Hypothetical reference circuit of 5000 km for analogue systems

Individually through the Electronic Bookshop: 20 CHF

#### General Recommendations

**G.221 (11/88)** Overall recommendations relating to carrier-transmission systems

*Individually through the Electronic Bookshop:* 20 CHF

**G.222 (11/88)** Noise objectives for design of carrier-transmission systems of 2500 km

*Individually through the Electronic Bookshop:* 20 CHF

**G.223 (11/88)** Assumptions for the calculation of noise on hypothetical reference circuits for telephony *Individually through the Electronic Bookshop:* 20 CHF

**G.224 (11/88)** Maximum permissible value for the absolute power level (power referred to one milliwatt) of a signalling pulse

This Recommendation was formerly also included in Q series under number Q.16

*Individually through the Electronic Bookshop:* 20 CHF

**G.225 (11/88)** Recommendations relating to the accuracy of carrier frequencies

Individually through the Electronic Bookshop: 20 CHF

G.226 (11/88) Noise on a real link

Individually through the Electronic Bookshop: 20 CHF

G.227 (11/88) Conventional telephone signal

Individually through the Electronic Bookshop: 20 CHF

**G.228 (11/88)** Measurement of circuit noise in cable systems using a uniform-spectrum random noise loading

*Individually through the Electronic Bookshop:* 20 CHF

**G.229 (11/88)** Unwanted modulation and phase jitter *Individually through the Electronic Bookshop:* 20 CHF

Translating equipment used on various carrier-transmission systems

**G.230 (11/88)** Measuring methods for noise produced by modulating equipment and through-connection filters

*Individually through the Electronic Bookshop:* 20 CHF

G.231 (11/88) Arrangement of carrier equipment

Individually through the Electronic Bookshop: 20 CHF

G.232 (11/88) 12-channel terminal equipments

Individually through the Electronic Bookshop: 20 CHF

**G.233 (11/88)** Recommendations concerning translating equipments

*Individually through the Electronic Bookshop:* 20 CHF

### G.234 (10/76) Withdrawn (03/93)

8-channel terminal equipments

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.235 (11/88) Withdrawn (03/93)

16-channel terminal equipments

Deleted after its content became technically out of date
Individually through the Electronic Bookshop: 20 CHF

Utilization of groups, supergroups, etc.

**G.241 (11/88)** Pilots on groups, supergroups, etc. *Individually through the Electronic Bookshop:* 20 CHF

**G.242 (11/88)** Through-connection of groups, supergroups, etc.

*Individually through the Electronic Bookshop:* 20 CHF

**G.243 (11/88)** Protection of pilots and additional measuring frequencies at points where there is a through-connection

*Individually through the Electronic Bookshop:* 20 CHF

# Individual characteristics of international carrier telephone systems on metallic lines

#### G.311 (11/88) Withdrawn (03/93)

General characteristics of systems providing 12 carrier telephone circuits on an open-wire pair

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.312 (11/88) Withdrawn (03/93)

Intermediate repeaters for open-wire carrier systems conforming to Recommendation G.311

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.313 (11/88) Withdrawn (03/93)

Open-wire lines for use with 12-channel carrier systems

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.314 (10/76) Withdrawn (03/93)

General characteristics of systems providing eight carrier telephone circuits on an open-wire pair

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

Carrier telephone systems on unloaded symmetric cable pairs, providing groups or supergroups

**G.322 (11/88)** General characteristics recommended for systems on symmetric pair cables

*Individually through the Electronic Bookshop:* 20 CHF

#### G.323 (11/88) Withdrawn (03/93)

A typical transistorized system on symmetric cable pairs

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.324 (10/76) Withdrawn (03/93)

General characteristics for valve-type systems on symmetric cable pairs

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

**G.325** (11/88) General characteristics recommended for systems providing 12 telephone carrier circuits on a symmetric cable pair [(12 + 12) systems]

*Individually through the Electronic Bookshop:* 20 CHF

# G.326 (11/88) Withdrawn (03/93)

Typical systems on symmetric cable pairs [(12 + 12)] systems

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.327 (10/76) Withdrawn (03/93)

Valve-type systems offering 12 carrier telephone circuits on a symmetric cable pair [(12 + 12) systems]

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

Carrier systems on 2.6/9.5 mm coaxial cable pairs

**G.332 (11/88)** 12 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

**G.333 (11/88)** 60 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs

Individually through the Electronic Bookshop: 20 CHF

**G.334 (11/88)** 18 MHz systems on standardized 2.6/9.5 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

#### G.337 (10/76) Withdrawn (03/93)

General characteristics of systems on 2.6/9.5 mm coaxial cable pairs

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

### G.338 (10/76) Withdrawn (03/93)

4 MHz valve-type systems on standardized 2.6/9.5 mm coaxial cable pairs

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

### G.339 (10/76) Withdrawn (03/93)

12 MHz valve-type systems on standardized 2.6/9.5 mm coaxial cable pairs

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### Carrier systems on 1.2/4.4 mm coaxial cable pairs

**G.341 (11/88)** 1.3 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

**G.343 (11/88)** 4 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

**G.344 (11/88)** 6 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs

Individually through the Electronic Bookshop: 20 CHF

**G.345 (11/88)** 12 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

**G.346 (11/88)** 18 MHz systems on standardized 1.2/4.4 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

### Additional Recommendations on cable systems

**G.352 (11/88)** Interconnection of coaxial carrier systems of different designs

*Individually through the Electronic Bookshop:* 20 CHF

#### G.356 (11/80) Withdrawn (03/93)

(120 + 120) channel systems on a single coaxial pair

Deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

### G.361 (11/88) Withdrawn (03/93)

Systems providing three carrier telephone circuits on a pair of open-wire lines

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

# G.371 (11/88) Withdrawn (03/93)

FDM carrier systems for submarine cable

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

General characteristics of international carrier telephone systems on radio-relay or satellite links and interconnection with metallic lines

### General Recommendations

**G.411 (11/88)** Use of radio-relay systems for international telephone circuits

#### G.412 (11/88) Withdrawn (03/93)

Terminal equipments of radio-relay systems forming part of a general telecommunication network

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

Interconnection of radio-relay links with carrier systems on metallic lines

### G.421 (11/88) Methods of interconnection

Individually through the Electronic Bookshop: 20 CHF

G.422 (11/88) Interconnection at audio-frequencies

Individually through the Electronic Bookshop: 20 CHF

**G.423 (11/88)** Interconnection at the baseband frequencies of frequency-division multiplex radio-relay systems

*Individually through the Electronic Bookshop:* 20 CHF

#### Hypothetical reference circuits

**G.431 (11/88)** Hypothetical reference circuits for frequency-division multiplex radio-relay systems

*Individually through the Electronic Bookshop:* 20 CHF

#### G.433 (06/64) Withdrawn (03/93)

Hypothetical reference circuit for trans-horizon radio-relay systems for telephony using frequency-division multiplex

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.434 (06/64) Withdrawn (03/93)

Hypothetical reference circuit for systems using analogue transmission in the fixed-satellite service

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

# Circuit noise

**G.441 (11/88)** Permissible circuit noise on frequency-division multiplex radio-relay systems

Individually through the Electronic Bookshop: 20 CH

**G.442 (11/88)** Radio-relay system design objectives for noise at the far end of a hypothetical reference circuit with reference to telegraphy transmission

*Individually through the Electronic Bookshop:* 20 CHF

# G.444 (06/64) Withdrawn (03/93)

Allowable noise power in the hypothetical reference circuit of trans-horizon radio-relay systems for telephony using frequency-division multiplex

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.445 (06/64) Withdrawn (03/93)

Allowable noise power in the hypothetical reference circuit for frequency-division multiplex telephony in the fixed-satellite service

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

# Coordination of radiotelephony and line telephony

Radiotelephone circuits

**G.451 (11/88)** Use of radio links in international telephone circuits

Individually through the Electronic Bookshop: 20 CHF

#### G.453 (11/88) Withdrawn (03/93)

Improved transmission system for HF radio-telephone circuits

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### G.464 (11/88) Withdrawn (03/93)

Principles of the devices used to achieve privacy in radiotelephone conversations

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

Links with mobile stations

#### G.473 (11/88) Withdrawn (09/97)

Interconnection of a maritime mobile satellite system with the international automatic switched telephone service; transmission aspects

Withdrawn because it provided transmission planning information that was obsolete and no longer used

Individually through the Electronic Bookshop: 20 CHF

# **Supplements to Sections 2 to 5 of the Series G Recommendations**

**Suppl. 4 (12/72)** Certain methods of avoiding the transmission of excessive noise between interconnected systems

Green Book Volume III.2, page 572

**Suppl. 5 (10/84)** Measurement of the load of telephone circuits under field conditions

Red Book Fascicle III.2, page 295

**Suppl. 7 (12/72)** Loss-frequency response of channel-translating equipment used in some countries for international circuits

Green Book Volume III.2, page 590

**Suppl. 8 (12/72)** Method proposed by the Belgian telephone administration for interconnection between coaxial and symmetric pair systems

Green Book Volume III.2, page 591

**Suppl. 13 (10/76)** Noise at the terminals of the battery supply

Orange Book Fascicle III.3, page 664

**Suppl. 17 (10/84)** Group-delay distortion performance of terminal equipment

Red Book Fascicle III.2, page 311

**Suppl. 22 (10/84)** Mathematical models of multiplex signals

Red Book Fascicle III.2, page 326

**Suppl. 26 (10/84)** Estimating the signal load margin of FDM wideband amplifier equipment and transmission systems

Red Book Fascicle III.2, page 344

#### Suppl. 27 (10/84) Interference from external sources

This Supplement is also published as G.900 series supplement in Red Book fascicle III.3
Red Book Fascicle III.2, page 346

### **Testing equipments**

**G.511 (02/98)** Test methodology for Group 3 facsimile processing equipment in the Public Switched Telephone Network

This Recommendation was renumbered as ITU-T Rec. T.5 on 2002-02-15 without further modification

40pp E 13076 F 13077 S 13078 22 CHF

# G.541 (10/76) Withdrawn (03/93)

Specification of factory lengths of loaded telecommunication cable

Deleted after its content became technically out of date
Individually through the Electronic Bookshop: 20 CHF

#### G.542 (10/76) Withdrawn (03/93)

Specification of loading coils for loaded telecommunication cables

Deleted after its content became technically out of date
Individually through the Electronic Bookshop: 20 CHF

#### G.543 (10/76) Withdrawn (03/93)

Specification for repeater sections of loaded telecommunication cable

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

# G.544 (10/76) Withdrawn (03/93)

Specifications for terminal equipment and intermediate repeater stations

Deleted after its content became technically out of date
Individually through the Electronic Bookshop: 20 CHF

#### **Transmission media characteristics**

#### General

G.601 (11/88) Terminology for cables

*Individually through the Electronic Bookshop:* 20 CHF

**G.602 (11/88)** Reliability and availability of analogue cable transmission systems and associated equipments

*Individually through the Electronic Bookshop:* 20 CHF

**G.611 (11/88)** Characteristics of symmetric cable pairs for analogue transmission

*Individually through the Electronic Bookshop:* 20 CHF

**G.612 (11/88)** Characteristics of symmetric cable pairs designed for the transmission of systems with bit rates of the order of 6 to 34 Mbit/s

*Individually through the Electronic Bookshop:* 20 CHF

**G.613 (11/88)** Characteristics of symmetric cable pairs usable wholly for the transmission of digital systems with a bit rate of up to 2 Mbits

*Individually through the Electronic Bookshop:* 20 CHF

**G.614 (11/88)** 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

*Individually through the Electronic Bookshop:* 20 CHF

#### Land coaxial cable pairs

**G.621 (11/88)** Characteristics of 0.7/2.9 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

**G.622 (11/88)** Characteristics of 1.2/4.4 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

**G.623 (11/88)** Characteristics of 2.6/9.5 mm coaxial cable pairs

*Individually through the Electronic Bookshop:* 20 CHF

#### Submarine cables

**G.631 (11/88)** Types of submarine cable to be used for systems with line frequencies of less than about 45 MHz

*Individually through the Electronic Bookshop:* 20 CHF

#### G.641 (11/88) Withdrawn (03/93)

Waveguide diameters

Deleted after its content became technically out of date

# Optical fibre

**G.650.1 (06/02)** Definitions and test methods for linear, deterministic attributes of single-mode fibre and cable

Results from the subdivision of ITU-T Rec. G.650 (2000-10)

68pp E 22714 F 22715 S 22716 29 CHF

**G.650.2 (06/02)** Definitions and test methods for statistical and non-linear attributes of single-mode fibre and cable

Results from the subdivision of ITU-T Rec. G.650 (2000-10)

56pp E 22691 F 22692 S 22693 29 CHF

# Optical fibre cables

G.651 (02/98) Characteristics of a  $50/125 \mu m$  multimode graded index optical fibre cable

36pp E 13535 F 13536 S 13537 22 CHF

**G.652 (10/00)** Characteristics of a single-mode optical fibre cable

20pp E 19587 F 19588 S 19589 17 CHF

**G.653 (10/00)** Characteristics of a dispersion-shifted single-mode optical fibre cable

16pp E 19857 F 19858 S 19859 12 CHF

#### Optical fibre

**G.654 (06/02)** Characteristics of cut-off shifted single-mode optical fibre and cable

24pp E 22694 F 22695 S 22696 17 CHF

#### Optical fibre cables

**G.655 (10/00)** Characteristics of a non-zero dispersion shifted single-mode optical fibre cable 24pp E 19958 F 19959 S 19960 17 CHF

# Characteristics of optical components and subsystems

**G.661 (10/98)** Definition and test methods for the relevant generic parameters of optical amplifier devices and subsystems

16pp E 14732 F 14733 S 14734 12 CHF

**G.662 (10/98)** Generic characteristics of optical amplifier devices and subsystems

16pp E 14629 F 14630 S 14631 12 CHF

**G.663 (04/00)** Application related aspects of optical amplifier devices and subsystems

40pp E 19770 F 19771 S 19772 22 CHF

#### Optical fibre cables

G.663 Amendment 1 (01/03) Amendements to Appendix II

To be published

# Characteristics of optical components and subsystems

**G.664 (07/99)** Optical safety procedures and requirements for optical transport systems

16pp E 16396 F 16397 S 16398 12 CHF

# Characteristics of optical components and subsystems

**G.671 (06/02)** Transmission characteristics of optical components and subsystems

To be published...

# Characteristics of optical components and subsystems

**G.691 (10/00)** Optical interfaces for single-channel STM-64, STM-256 and other SDH systems with optical amplifiers

53pp E 20187 F 20188 S 20189 22 CHF

**G.692 (10/98)** Optical interfaces for multichannel systems with optical amplifiers

40pp E 14418 F 14419 S 14420 22 CHF

#### G.692 Corrigendum 1 (01/00)

Characteristics of optical components and subsystems

# G.692 Corrigendum 2 (06/02)

Characteristics of optical components and subsystems

**G.693 (11/01)** Optical interfaces for intra-office systems

24pp E 21878 F 21879 S 21880 17 CHF

# Characteristics of optical components and subsystems

**G.694.1 (06/02)** Spectral grids for WDM applications: DWDM frequency grid

14pp E 22348 F 22349 S 22350 12 CHF

**G.694.2 (06/02)** Spectral grids for WDM applications: CWDM wavelength grid

12pp E 22398 F 22399 S 22400 9 CHF

# **Supplements to Section 6 of the Series G Recommendations**

**Suppl. 19 (10/84)** Digital crosstalk measurement (method used by the Administrations of France, the Netherlands and Spain)

Red Book Fascicle III.2, page 326

# Digital terminal equipments

#### General

# G.700 (11/88) Withdrawn (03/93)

Framework of the series G.700, G.800 and G.900 Recommendations

Deleted after its content became technically out of date

**G.701 (03/93)** Vocabulary of digital transmission and multiplexing, and pulse code modulation (PCM) terms

37pp E 4350 F 4349 S 4351 20 CHF

G.702 (11/88) Digital hierarchy bit rates

*Individually through the Electronic Bookshop:* 20 CHF

#### General

**G.703 (11/01)** Physical/electrical characteristics of hierarchical digital interfaces

62pp E 22057 F 22058 S 22059 29 CHF

#### General

**G.704 (10/98)** Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels

44pp E 15440 F 15441 S 15442 22 CHF

## G.705 (11/88) Withdrawn (10/96)

Characteristics required to terminate digital links on a digital exchange

The content of this Recommendation is now covered by ITU-T Q.500 series, and more specifically Q.554

**G.705 (10/00)** Characteristics of plesiochronous digital hierarchy (PDH) equipment functional blocks

Available as a prepublished version

204pp E 20964 F 20965 S 20966 73 CHF

**G.706 (04/91)** Frame alignment and cyclic redundancy check (CRC) procedures relating to basic frame structures defined in Recommendation G.704

16pp E 2101 F 2100 S 2102 13 CHF

**G.707/Y.1322 (10/00)** Network node interface for the synchronous digital hierarchy (SDH)

180pp E 20454 F 20455 S 20456 73 CHF

#### General

**G.707/Y.1322 Amendment 1 (11/01)** Amendment 1 16pp E 21761 F 21762 S 21763 12 CHF

**G.707/Y.1322 Amendment 2 (08/02)** Amendment 2 16pp E 22717 F 22718 S 22719 12 CHF

#### General

#### G.707/Y.1322 Corrigendum 1 (03/01)

To be published...

#### General

#### G.707/Y.1322 Corrigendum 2 (11/01)

#### G.707/Y.1322 Erratum 1 (09/02)

2pp

#### General

#### G.708 (03/93) Withdrawn (03/96)

Network node interface for the synchronous digital hierarchy

Merged with ITU-T G.707 in 1993

**G.708 (07/99)** Sub STM-0 network node interface for the synchronous digital hierarchy (SDH)

20pp E 16300 F 16301 S 16302 17 CHF

# G.709 (03/93) Withdrawn (03/96)

Synchronous multiplexing structure

Merged with ITU-T G.707 in 1993

**G.709/Y.1331 (02/01)** Interfaces for the Optical Transport Network (OTN)

84pp E 20824 F 20825 S 20826 34 CHF

#### General

### G.709/Y.1331 Amendment 1 (11/01)

53pp E 22593 F 22594 S 22595 29 CHF

# Coding of analogue signals by pulse code modulation

# **G.711 Appendix I (09/99)** A high quality low-complexity algorithm for packet loss concealment with G.711

24pp E 17350 F 17351 S 17352 17 CHF

**G.711 Appendix II (02/00)** A comfort noise payload definition for ITU-T G.711 use in packet-based multimedia communication systems

16pp E 18278 F 18279 S 18280 12 CHF

**G.711 (11/88)** Pulse code modulation (PCM) of voice frequencies

Corresponding ANSI-C code is available in the G.711 module of the ITU-T G.191 Software Tools Library.

*Individually through the Electronic Bookshop:* 20 CHF

**G.712 (11/01)** Transmission performance characteristics of pulse code modulation channels

40pp E 22088 F 22089 S 22090 22 CHF

#### G.712 (11/88) Withdrawn (03/93)

Performance characteristics of PCM channels between 4-wire interfaces at voice frequencies

Deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

#### G.713 (11/88) Withdrawn (03/93)

Performance characteristics of PCM channels between 2-wire interfaces at voice frequencies

The content of this Recommendation is now covered by ITU-T G.712

*Individually through the Electronic Bookshop:* 20 CHF

### G.714 (11/88) Withdrawn (03/93)

Separate performance characteristics for the encoding and decoding sides of PCM channels applicable to 4-wire voice-frequency interfaces

The content of this Recommendation is now covered by ITU-T G.712

Individually through the Electronic Bookshop: 20 CHF

## G.715 (11/88) Withdrawn (03/93)

Separate performance characteristics for the encoding and decoding side of PCM channels applicable to 2-wire interfaces

The content of this Recommendation is now covered by ITU-T G.712

*Individually through the Electronic Bookshop:* 20 CHF

Coding of analogue signals by methods other than PCM

**G.720 (07/95)** Characterization of low-rate digital voice coder performance with non-voice signals

15pp E 6187 F 6186 S 6188 15 CHF

#### G.721 (11/88) Withdrawn (03/93)

32 kbit/s adaptive differential pulse code modulation (ADPCM)

The content of this Recommendation is now covered by ITU-T G.726

*Individually through the Electronic Bookshop:* 20 CHF

**G.722 Annex A (03/93)** Testing signal-to-total distortion ratio for 7 kHz audio-codecs at 64 kbit/s Recommendation G.722 connected back-to-back

3pp E 4117 F 4116 S 4118 8 CHF

# **G.722 Appendix II (03/87)** Digital test sequences for the verification of the G.722 64 kbit/s SB-ADPCM 7 kHz codec

This document corresponds to ITU-T Rec. G.722 Appendix II which was published in the Blue Book (1988). It includes one diskette containing the digital test sequences for the verification of the G.722 SB-ADPCM codec.

16pp E 10036 F 10037 S 10038 52 CHF

# G.722 (11/88) 7 kHz audio-coding within 64 kbit/s

Corresponding ANSI-C code is available in the G722 module of the ITU-T G.191 Software Tools Library *Individually through the Electronic Bookshop:* 34 CHF

**G.722.1 (09/99)** Coding at 24 and 32 kbit/s for hands-free operation in systems with low frame loss

This Recommendation includes an electronic attachment containing the reference code (release 1.2) and the test vectors for ITU-T G.722.1 algorithm implementation verification. This release includes the corrections indicated in corrigendum 1 (11/2000)

24pp E 17335 F 17336 S 17337 142 CHF

# **G.722.1 Annex A (02/00)** Packet format, capability identifiers and capability parameters

8pp E 18030 F 18031 S 18032 9 CHF

# **G.722.1 Annex B (11/00)** Floating-point implementation for G.722.1

This annex includes an electronic attachment containing the reference code and the test vectors for ITU-T G.722.1/Annex B floating-point algorithm implementation verification

8pp E 22251 F 22252 S 22253 59 CHF

#### G.722.1 Corrigendum 1 (11/00)

**G.722.2 (01/02)** Wideband coding of speech at around 16 kbit/s using Adaptive Multi-rate Wideband (AMR-WB)

72pp E 22382 F 22383 S 22384 34 CHF

#### G.722.2 Annex A (01/02) Comfort noise aspects

18pp E 22293 F 22294 S 22295 12 CHF

# **G.722.2 Annex B (01/02)** Source Controlled Rate operation

16pp E 22230 F 22231 S 22232 12 CHF

### G.722.2 Annex C (01/02) Fixed-point C-code

This Annex includes an electronic attachment containing version 5.3.0 of the fixed-point C-code for the G.722.2 adaptive multi-rate wideband (AMR-WB) speech transcoder

E 22335 F 22336 S 22337 67 CHF

#### G.722.2 Annex D (01/02) Digital test sequences

This Annex includes an electronic attachment containing the digital test sequences for a bit-exact implementation of the G.722.2 adaptive multi-rate wideband (AMR-WB) speech transcoder, voice activity detection, comfort noise generation, and source controlled rate operation, version 5.3.0. Test sequences are freely available on the ITU publications website. They are also available for a fee on a CD-ROM from the ITU Sales department at sales@itu.int

14pp E 22179 F 22180 S 22181 12 CHF

### G.722.2 Annex E (01/02) Frame structure

28pp E 22236 F 22237 S 22238 17 CHF

# **G.722.2 Annex F (11/02)** AMR-WB usage in H.245

To be published...

# **G.722.2 Appendix I (02/02)** Error concealment of erroneous or lost frames

18pp E 22227 F 22228 S 22229 12 CHF

G.723 Speech coders

# G.723 (11/88) Withdrawn (03/93)

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

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

Individually through the Electronic Bookshop: 20 CHF

# **G.723.1 (03/96)** Dual rate speech coder for multimedia communications transmitting at 5.3 and 6.3 kbit/s

Test vectors, test sequences and C Reference code described in this Recommendation are common to Recommendation main body and to Annex A, and may be found on 3 diskettes included with G.723.1 Annex A.

32pp E 6839 F 6840 S 6841 17 CHF

# G.723.1 Annex A (11/96) Silence compression scheme

This Annex includes 3 diskettes which are common to Recommendation main body and to this annex and which contain test vectors and C reference code for implementation verification of the G.723.1 fixed point dual rate speech coder for multimedia communications.

20pp E 10039 F 10040 S 10041 104 CHF

# **G.723.1 Annex B (11/96)** Alternative specification based on floating point arithmetic

This Annex includes one CD-ROM containing the reference code and the test vectors for implementation verification of the G.723.1 floating point speech coder. The CD-ROM may be replaced on demand by 14 diskettes.

8pp E 10042 F 10043 S 10044 134 CHF

# **G.723.1 Annex C (11/96)** Scalable channel coding scheme for wireless applications

This Annex includes one diskette containing the reference code and the test vectors for implementation verification of the scalable channel coding scheme.

24pp E 10045 F 10046 S 10047 57 CHF

G.724 (11/88) Characteristics of a 48-channel low bit rate encoding primary multiplex operating at 1544 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

# **G.725 (11/88)** System aspects for the use of the 7 kHz audio codec within 64 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

# **G.726 (12/90)** 40, 32, 24, 16 kbit/s adaptive differential pulse code modulation (ADPCM)

Corresponding ANSI-C code is available in the G.726 module of the ITU-T G.191 Software Tools Library

57pp E 1951 F 1950 S 1952 21 CHF

# **G.726 Annex A (11/94)** Extensions of Recommendation G.726 for use with uniform-quantized input and output

5pp E 5879 F 5878 S 5880 8 CHF

# **G.726 Appendix III (05/94)** Comparison of ADPCM algorithms

This Appendix is published with the double number G.726 App. III and G.727 App. II

41pp E 5660 F 5658 S 5662 20 CHF

**G.726 Appendix II Test vectors (03/91)** Digital test sequences for the verification of the G.726 40, 32, 24 and 16 kbit/s ADPCM algorithm

This document corresponds to G.726 Appendix II. It includes 2 diskettes containing respectively the A-Law and Mu-Law digital test sequences for the verification of the G.726 ADPCM codec implementations. The document reproduces the user guide published in the CCITT collective letter No. 11/XV (1991).

E 10195 F 10196 S 10197 67 CHF

**G.727 (12/90)** 5-, 4-, 3- and 2-bit/sample embedded adaptive differential pulse code modulation (ADPCM)

Corresponding ANSI-C code is available in the G.727 module of the ITU-T G.191 Software Tools Library

55pp E 1975 F 1974 S 1976 21 CHF

**G.727 Annex A (11/94)** Extensions of Recommendation G.727 for use with uniform-quantized input and output

5pp E 5882 F 5881 S 5883 8 CHF

**G.727 Appendix II (05/94)** Comparison of ADPCM algorithms

This Appendix is published with the double number G.726 App. III and G.727 App. II

41pp E 5660 F 5658 S 5662 20 CHF

G.727 Appendix I Test vectors (03/91) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

This document corresponds to G.727 Appendix I. It includes 6 diskettes containing digital test sequences for the verification of the G.727 embedded ADPCM codec implementations. The document reproduces the user guide published in the CCITT collective letter No. 12/XV (1991).

E 10198 F 10199 S 10200 115 CHF

**G.728 (09/92)** Coding of speech at 16 kbit/s using low-delay code excited linear prediction

63pp E 2991 F 2984 S 2998 24 CHF

**G.728 Annex G (11/94)** 16 kbit/s fixed point specification

64pp E 6087 F 6086 S 6088 30 CHF

G.728 Annex G Corrigendum 1 (02/00)

**G.728 Annex H (05/99)** Variable bit rate LD-CELP operation mainly for DCME at rates less than 16 kbit/s

This Annex includes 1 CD-ROM containing the test data for verification of G.728 Annex H low bit rate LD-CELP implementations.

16pp E 17226 F 17227 S 17222 137 CHF

**G.728 Annex I (05/99)** Frame or packet loss concealment for the LD-CELP decoder

24pp E 16868 F 16869 S 16870 17 CHF

**G.728 Annex J (09/99)** Variable bit-rate operation of LD-CELP mainly for voiceband-data applications in DCME

This Annex includes 1 CD-ROM containing the test vectors for verification of G.728 Annex J variable bit-rate LD-CELP implementations.

38pp E 17560 F 17561 S 17562 147 CHF

G.728 Appendix II (11/95) Speech performance

8pp E 6766 F 6767 S 6768 9 CHF

**G.728 Appendix I Software (07/95)** Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

This document corresponds to G.728 Appendix I. It includes 4 diskettes containing programs and test sequences for verification of the floating point and fixed point implementations of the G.728 LD-CELP algorithm. The document reproduces the user guide published in the CCITT collective letter No. 17/XV (1992).

12pp E 10201 F 10202 S 10203 85 CHF

**G.729 (03/96)** Coding of speech at 8 kbit/s using conjugate-structure algebraic-code-excited linear-prediction (CS-ACELP)

This Recommendation includes 3 diskettes containing source code and test sequences for implementation verification of the algorithm of the G.729 8 kbit/s CS-ACELP speech coder.

40pp E 10204 F 10205 S 10206 92 CHF

**G.729 Annex A (11/96)** Reduced complexity 8 kbit/s CS-ACELP speech codec

This Annex includes 3 diskettes containing source code and test sequences for implementation verification of the algorithm of the G.729 reduced complexity 8 kbit/s CS-ACELP speech coder.

12pp E 10207 F 10208 S 10209 82 CHF

**G.729 Annex B (10/96)** A silence compression scheme for G.729 optimized for terminals conforming to Recommendation V.70

This Annex includes 1 electronic attachment containing source code and test sequences for implementation verification of the algorithm of the G.729 Silence compression scheme version 1.4, which reflects modifications given in Corrigendum 2 (02/2000).

E 13373 F 13375 S 13376 57 CHF

# Coding of analogue signals by methods other than PCM

# G.729 Annex B Corrigendum 2 (02/00)

This corrigendum concerns only the software; the resulting version 1.4 is included in the published ITU-T Recommendation G.729 Annex B (10/1996)

# Coding of analogue signals by methods other than PCM

#### G.729 Annex B Corrigendum 3 (03/01)

**G.729 Annex** C+ **(02/00)** Reference floating-point implementation for integrating G.729 CS-ACELP speech coding main body with Annexes B, D and E

This annex includes an electronic attachment containing version 2.1 of reference C code for floating point implementation of CS-ACELP at 6.4/8/11.8 kbit/s with DTX functionality.

16pp E 17771 F 17772 S 17773 137 CHF

#### G.729 Annex C+ Corrigendum 1 (03/01)

# **G.729 Annex D (09/98)** 6.4 kbit/s CS-ACELP speech coding algorithm

This Annex includes one electronic attachment containing version 1.3 of source C code for fixed point implementation of the G.729 6.4 kbit/s CS-ACELP speech coder, which reflects modifications given in Corrigendum 1 (02/2000).

14pp E 14247 F 14248 S 14249 52 CHF

# Coding of analogue signals by methods other than PCM

# G.729 Annex D Corrigendum 1 (02/00)

This corrigendum concerns only the software; the resulting version 1.3 is included in the published ITU-T Recommendation G.729 Annex D (09/1998)

# Coding of analogue signals by methods other than PCM

# **G.729 Annex E (09/98)** 11.8 kbit/s CS-ACELP speech coding algorithm

This Annex includes one electronic attachment containing version 1.3 of source C code and test vectors for fixed point implementation of the G.729 11.8 kbit/s CS-ACELP speech coder, which reflects modifications given in Corrigendum 1 (02/2000).

28pp E 14448 F 14449 S 14450 57 CHF

# Coding of analogue signals by methods other than PCM

#### G.729 Annex E Corrigendum 1 (02/00)

This corrigendum concerns only the software; the resulting version 1.3 is included in the published ITU-T Recommendation G.729 Annex E (09/1998)

# Coding of analogue signals by methods other than PCM

# **G.729 Annex F (02/00)** Reference implementation of G.729 Annex B DTX functionality for Annex D

This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s 8 kbit/s with DTX functionality.

8pp E 17831 F 17832 S 17833 134 CHF

## G.729 Annex F Corrigendum 1 (03/01)

**G.729 Annex G (02/00)** Reference implementation of G.729 Annex B DTX functionality for Annex E This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 8 kbit/s and 11.8 kbit/s with DTX functionality.

16pp E 17949 F 17950 S 17951 137 CHF

# G.729 Annex G Corrigendum 1 (03/01)

**G.729 Annex H (02/00)** Reference implementation of switching procedure between G.729 Annexes D and E

This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s 8 kbit/s and 11.8 kbit/s without DTX functionality.

E 17838 F 17839 S 17840 134 CHF

G.729 Annex I (02/00) Reference fixed-point implementation for integrating G.729 CS-ACELP speech coding main body with Annexes B, D and E This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s 8 kbit/s and 11.8 kb/s with DTX functionality.

16pp E 17828 F 17829 S 17830 137 CHF

#### G.729 Annex I Corrigendum 1 (03/01)

G.729 Appendix I (06/01) Appendix I: External synchronous reset performance for G.729 codecs in systems using external VAD/DTX/CNG

F 21747 E 21746 12pp 9 CHF

G.729 Annex C Encl. (09/98) Reference floating-point implementation for G.729 CS-ACELP 8 kbit/s speech coding

This Annex includes 1 diskette containing version 1.01 of reference C code for floating point implementation of the G.729 8 kbit/s CS-ACELP speech coder.

Diskette + Annex.

E 14244 F 14245 S 14246 49 CHF

Principal characteristics of primary multiplex equipment

G.731 (11/88) Primary PCM multiplex equipment for voice frequencies

Individually through the Electronic Bookshop: 20 CHF

G.732 (11/88) Characteristics of primary PCM multiplex equipment operating at 2048 kbit/s

Individually through the Electronic Bookshop: 20 CHF

G.733 (11/88) Characteristics of primary PCM multiplex equipment operating at 1544 kbit/s 20 CHF

*Individually through the Electronic Bookshop:* 

G.734 (11/88) Characteristics of synchronous digital multiplex equipment operating at 1544 kbit/s Individually through the Electronic Bookshop: 20 CHF

G.735 (11/88) Characteristics of primary PCM multiplex equipment operating at 2048 kbit/s and offering synchronous digital access at 384 kbit/s and/or 64 kbit/s

Individually through the Electronic Bookshop: 20 CHF

**G.736 (03/93)** Characteristics of a synchronous digital multiplex equipment operating at 2048 kbit/s E 4293 F 4292 S 4294 8 CHF 6pp

G.737 (11/88) Characteristics of an external access equipment operating at 2048 kbit/s offering synchronous digital access at 384 kbit/s and/or 64 kbit/s

Individually through the Electronic Bookshop: 20 CHF

G.738 (11/88) Characteristics of primary PCM multiplex equipment operating at 2048 kbit/s and offering synchronous digital access at 320 kbit/s and/or 64 kbit/s

Individually through the Electronic Bookshop: 20 CHF

G.739 (11/88) Characteristics of an external access equipment operating at 2048 kbit/s offering synchronous digital access at 320 kbit/s and/or 64 kbit/s

Individually through the Electronic Bookshop: 20 CHF Principal characteristics of second order multiplex equipment

G.741 (11/88) General considerations on second order multiplex equipments

Individually through the Electronic Bookshop: 20 CHF

G.742 (11/88) Second order digital multiplex equipment operating at 8448 kbit/s and using positive justification

Individually through the Electronic Bookshop: 20 CHF

G.743 (11/88) Second order digital multiplex equipment operating at 6312 kbit/s and using positive justification

Individually through the Electronic Bookshop: 20 CHF

G.744 (11/88) Second order PCM multiplex equipment operating at 8448 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

**G.745 (11/88)** Second order digital multiplex equipment operating at 8448 kbit/s and using positive/zero/negative justification

Individually through the Electronic Bookshop: 20 CHF

G.746 (11/88) Characteristics of second order PCM multiplex equipment operating at 6312 kbit/s

Individually through the Electronic Bookshop: 20 CHF

**G.747 (11/88)** Second order digital multiplex equipment operating at 6312 kbit/s and multiplexing three tributaries at 2048 kbit/s

20 CHF Individually through the Electronic Bookshop:

Principal characteristics of higher order multiplex equipment

G.751 (11/88) Digital multiplex equipments operating at the third order bit rate of 34 368 kbit/s and the fourth order bit rate of 139 264 kbit/s and using positive justification

Individually through the Electronic Bookshop: 20 CHF

G.752 (11/88) Characteristics of digital multiplex equipments based on a second order bit rate of 6312 kbit/s and using positive justification

Individually through the Electronic Bookshop: 20 CHF

G.753 (11/88) Third order digital multiplex equipment operating at 34 368 kbit/s and using positive/zero/negative justification

**G.754 (11/88)** Fourth order digital multiplex equipment operating at 139 264 kbit/s and using positive/zero/negative justification

*Individually through the Electronic Bookshop:* 20 CHF

**G.755 (11/88)** Digital multiplex equipment operating at 139 264 kbit/s and multiplexing three tributaries at 44 736 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

Principal characteristics of transcoder and digital multiplication equipment

**G.761 (11/88)** General characteristics of a 60-channel transcoder equipment

*Individually through the Electronic Bookshop:* 20 CHF

**G.762 (11/88)** General characteristics of a 48-channel transcoder equipment

*Individually through the Electronic Bookshop:* 20 CHF

**G.763 (10/98)** Digital circuit multiplication equipment using G.726 ADPCM and digital speech interpolation

This Recommendation includes 2 diskettes. The first one contains A-Law and m-Law test vectors for DCME verification. The second one contains example transmit/receive SDLs.

Covering note, May 2000: Erratum

176pp E 16891 F 16892 S 16893 128 CHF

# G.763 Appendix I (10/98) Additional requirements

This appendix includes one diskette containing information on the additional requirements.

To be published...

**G.763 Erratum (12/00)** Erratum to Recommendation ITU-T G.763 (10/98)

**G.764 (12/90)** Voice packetization – Packetized voice protocols

21pp E 1984 F 1983 S 1985 13 CHF

G.764 Appendix I (11/95) Packetization guide

20pp E 6805 F 6806 S 6807 17 CHF

**G.765 (09/92)** Packet circuit multiplication equipment

111pp E 3195 F 3194 S 3196 38 CHF

G.765 Appendix I (11/95) A guide to PCME

36pp E 6901 F 6902 S 6903 22 CHF

**G.766 (11/96)** Facsimile demodulation/remodulation for digital circuit multiplication equipment

108pp E 10821 F 10822 S 10823 44 CHF

**G.767 (10/98)** Digital circuit multiplication equipment using 16 kbit/s LD-CELP, digital speech interpolation and facsimile demodulation/remodulation

32pp E 14434 F 14435 S 14436 17 CHF

**G.768 (03/01)** Digital circuit multiplication equipment using 8 kbit/s CS-ACELP

34pp E 20820 F 20822 S 20823 17 CHF

**G.769/Y.1242 (08/02)** Circuit Multiplication Equipment optimized for IP-based networks

To be published...

Operations, administration and maintenance features of transmission equipment

# G.771 (11/88) Withdrawn (03/93)

Q-interfaces and associated protocols for transmission equipment in the TMN

Deleted after its content became technically out of date

**G.772 (03/93)** Protected monitoring points provided on digital transmission systems

5pp E 4111 F 4110 S 4112 8 CHF

**G.773 (03/93)** Protocol suites for Q-interfaces for management of transmission systems

17pp E 4153 F 4152 S 4154 15 CHF

G.774 (02/01) Synchronous digital hierarchy (SDH)
 Management information model for the network element view

Available as a prepublished version

108pp E 21119 F 21120 S 21121 44 CHF

**G.774.1 (02/01)** Synchronous digital hierarchy (SDH) – Bidirectional performance monitoring for the network element view

40pp E 20838 F 20839 S 20840 22 CHF

**G.774.2 (02/01)** Synchronous digital hierarchy (SDH) – Configuration of the payload structure for the network element view

62pp E 21064 F 21065 S 21066 29 CHF

**G.774.3 (02/01)** Synchronous digital hierarchy (SDH) management of multiplex-section protection for the network element view

48pp E 21540 F 21541 S 21542 34 CHF

G.774.4 (02/01) Synchronous digital hierarchy (SDH) – Management of the subnetwork connection protection for the network element view

56pp E 21639 F 21640 S 21641 29 CHF

**G.774.5 (02/01)** Synchronous digital hierarchy (SDH) management of connection supervision functionality (HCS/LCS) for the network element view

24pp E 20841 F 20842 S 20843 17 CHF

**G.774.6 (02/01)** Synchronous Digital Hierarchy (SDH) – Unidirectional performance monitoring for the network element view

56pp E 20882 F 20883 S 20884 22 CHF

**G.774.7 (02/01)** Synchronous digital hierarchy (SDH) – Management of lower order path trace and interface labelling for the network element view

18pp E 20844 F 20845 S 20846 12 CHF

**G.774.8 (02/01)** Synchronous digital hierarchy (SDH) – Management of radio-relay systems for the network element view

40pp E 20853 F 20854 S 20855 22 CHF

**G.774.9 (02/01)** Synchronous digital hierarchy (SDH) – Configuration of linear multiplex-section protection for the network element view

20pp E 20850 F 20851 S 20852 17 CHF

**G.774.10 (02/01)** Synchronous Digital Hierarchy (SDH) Multiplex Section (MS) shared protection ring management for the network element view

42pp E 20946 F 20947 S 20948 22 CHF

G.775 (10/98) Loss of Signal (LOS), Alarm Indication Signal (AIS) and Remote Defect Indication (RDI) defect detection and clearance criteria for PDH signals

12pp E 14317 F 14318 S 14319 12 CHF

**G.776.1 (10/98)** Managed objects for signal processing network elements

This Recommendation includes one diskette containing the information model of Signal Processing Network Elements (SPNE).

12pp E 14495 F 14496 S 14497 49 CHF

**G.776.3 (04/00)** ADPCM DCME configuration map report

28pp E 18595 F 18596 S 18597 17 CHF

Principal characteristics of multiplexing equipment for the synchronous digital hierarchy

**G.780 (07/99)** Vocabulary of terms for synchronous digital hierarchy (SDH) networks and equipment

32pp E 16506 F 16507 S 16508 17 CHF

G.781 (01/94) Withdrawn (04/97)

Structure of Recommendations on equipment for the synchronous digital hierarchy (SDH)

Merged with ITU-T G.783 in 1997

2pp E 4632 F 4631 S 4633 8 CHF

**G.781 (07/99)** Synchronization layer functions

124pp E 16613 F 16614 S 16615 49 CHF

G.782 (01/94) Withdrawn (04/97)

Types and general characteristics of synchronous digital hierarchy (SDH) equipment

Merged with ITU-T G.783 in 1997

29pp E 5550 F 5549 S 5551 15 CHF

**G.783 (10/00)** Characteristics of synchronous digital hierarchy (SDH) equipment functional blocks

274pp E 20440 F 20441 S 20442 96 CHF

Principal characteristics of multiplexing equipment for the synchronous digital hierarchy

**G.783 Amendment 1 (06/02)** Amendment 1

20pp E 23064 F 23065 S 23066 12 CHF

Principal characteristics of multiplexing equipment for the synchronous digital hierarchy

**G.784 (07/99)** Synchronous digital hierarchy (SDH) management

56pp E 16534 F 16535 S 16536 29 CHF

**G.785** (11/96) Characteristics of a flexible multiplexer in a synchronous digital hierarchy environment

24pp E 11681 F 11682 S 11683 17 CHF

Other terminal equipment

**G.791 (11/88)** General considerations on transmultiplexing equipments

*Individually through the Electronic Bookshop:* 20 CHF

**G.792 (11/88)** Characteristics common to all transmultiplexing equipments

*Individually through the Electronic Bookshop:* 20 CHF

**G.793 (11/88)** Characteristics of 60-channel transmultiplexing equipments

*Individually through the Electronic Bookshop:* 20 CHF

**G.794 (11/88)** Characteristics of 24-channel transmultiplexing equipments

*Individually through the Electronic Bookshop:* 20 CHF

**G.795 (11/88)** Characteristics of codecs for FDM assemblies

**G.796 (09/92)** Characteristics of a 64 kbit/s cross-connect equipment with 2048 kbit/s access ports

10pp E 2992 F 2985 S 2999 11 CHF

#### G.796 Corrigendum 1 (10/98)

**G.797 (03/96)** Characteristics of a flexible multiplexer in a plesiochronous digital hierarchy environment

48pp E 7302 F 7303 S 7304 22 CHF

**G.798 (01/02)** Characteristics of optical transport network hierarchy equipment functional blocks

244pp E 22889 F 22890 S 22891 96 CHF

#### G.798 Amendment 1 (06/02)

22pp E 22688 F 22689 S 22690 17 CHF

# **Supplements to Section 7 of the Series G Recommendations**

**Suppl. 28 (10/84)** Application of transmultiplexers, FDM codecs, data-in-voice (DIV) systems and data-over-voice (DOV) systems during the transition from an analogue to a digital network

Red Book Fascicle III.3, page 397

# Suppl. 31 (11/88) Withdrawn (04/00)

Status of work of presently considered digital circuit multiplication equipment (DCME) documents

This Supplement was withdrawn because its was no longer relevant

**Suppl. 32 (11/88)** Transfer of alarm information on 60-channel transmultiplexing equipment

#### **Digital networks**

# General aspects

G.801 (11/88) Digital transmission models

Individually through the Electronic Bookshop: 20 CHF

**G.802 (11/88)** Interworking between networks based on different digital hierarchies and speech encoding laws

*Individually through the Electronic Bookshop:* 20 CHF

**G.803 (03/00)** Architecture of transport networks based on the synchronous digital hierarchy (SDH)

56pp E 19599 F 19600 S 19601 29 CHF

**G.804 (02/98)** ATM cell mapping into Plesiochronous Digital Hierarchy (PDH)

20pp E 13308 F 13309 S 13310 17 CHF

**G.805 (03/00)** Generic functional architecture of transport networks

58pp E 20094 F 20095 S 20096 29 CHF

**G.806 (10/00)** Characteristics of Transport Equipment – Description Methodology and Generic Functionality

86pp E 20199 F 20200 S 20201 34 CHF

**G.807/Y.1302 (07/01)** Requirements for automatic switched transport networks (ASTN)

22pp E 20720 F 20721 S 20722 17 CHF

### Design objectives for digital networks

**G.810 (08/96)** Definitions and terminology for synchronization networks

24pp E 9794 F 9795 S 9796 17 CHF

#### **G.810** Corrigendum 1 (11/01)

**G.811 (09/97)** Timing characteristics of primary reference clocks

8pp E 12242 F 12243 S 12244 9 CHF

**G.812 (06/98)** Timing requirements of slave clocks suitable for use as node clocks in synchronization networks

40pp E 13565 F 13566 S 13567 22 CHF

**G.813 (08/96)** Timing characteristics of SDH equipment slave clocks (SEC)

36pp E 9774 F 9775 S 9776 22 CHF

#### **G.813** Corrigendum 1 (11/01)

### Quality and availability targets

**G.821 (12/02)** Error performance of an international digital connection operating at a bit rate below the primary rate and forming part of an Integrated Services Digital Network

To be published...

**G.822 (11/88)** Controlled slip rate objectives on an international digital connection

*Individually through the Electronic Bookshop:* 20 CHF

**G.823 (03/00)** The control of jitter and wander within digital networks which are based on the 2048 kbit/s hierarchy

48pp E 19758 F 19759 S 19760 22 CHF

**G.824 (03/00)** The control of jitter and wander within digital networks which are based on the 1544 kbit/s hierarchy

24pp E 19397 F 19398 S 19399 17 CHF

**G.825 (03/00)** The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy (SDH)

20pp E 19273 F 19274 S 19275 17 CHF

**G.825 Erratum 1 (08/01)** Erratum to Recommendation ITU-T G.825 (03/00)

**G.826 (12/02)** End-to-end error performance parameters and objectives for international, constant bit-rate digital paths and connections

To be published...

**G.827 (03/00)** Availability parameters and objectives for path elements of international constant bit-rate digital paths at or above the primary rate

20pp E 19761 F 19762 S 19763 17 CHF

**G.827.1 (11/00)** Availability performance objectives for end-to-end international constant bit-rate digital paths at or above the primary rate

16pp E 19866 F 19867 S 19868 12 CHF

**G.828 (03/00)** Error performance parameters and objectives for international, constant bit rate synchronous digital paths

24pp E 19498 F 19499 S 19500 17 CHF

### G.828 Corrigendum 1 (07/01)

**G.829 (12/02)** Error performance events for SDH multiplex and regenerator sections

To be published...

#### Network capabilities and functions

**G.831 (03/00)** Management capabilities of transport networks based on the synchronous digital hierarchy (SDH)

16pp E 19527 F 19528 S 19529 12 CHF

**G.832 (10/98)** Transport of SDH elements on PDH networks – Frame and multiplexing structures

24pp E 14607 F 14608 S 14609 17 CHF

# SDH network characteristics

**G.841 (10/98)** Types and characteristics of SDH network protection architectures

140pp E 15794 F 15795 S 15796 55 CHF

#### **G.841 Corrigendum 1 (08/02)**

#### SDH network characteristics

**G.842 (04/97)** Interworking of SDH network protection architectures

36pp E 12034 F 12035 S 12036 22 CHF

### Management of transport network

**G.851.1 (11/96)** Management of the transport network – Application of the RM-ODP framework

72pp E 11054 F 11055 S 11056 34 CHF

**G.852.1 (11/96)** Enterprise viewpoint for simple subnetwork connection management

16pp E 11684 F 11685 S 11686 12 CHF

**G.852.2 (03/99)** Enterprise viewpoint description of transport network resource model

36pp E 15928 F 15929 S 15930 22 CHF

**G.852.3 (03/99)** Enterprise viewpoint for topology management

20pp E 15736 F 15740 S 15741 17 CHF

**G.852.6 (03/99)** Enterprise viewpoint for trail management

16pp E 15691 F 15694 S 15695 12 CHF

**G.852.8 (03/99)** Enterprise viewpoint for pre-provisioned adaptation management

12pp E 14296 F 14297 S 14298 12 CHF

**G.852.10 (03/99)** Enterprise viewpoint for pre-provisioned link connection management

12pp E 15696 F 15697 S 15698 12 CHF

**G.852.12 (03/99)** Enterprise viewpoint for pre-provisioned link management

16pp E 15699 F 15700 S 15701 12 CHF

**G.852.16 (01/01)** Enterprise viewpoint for pre-provisioned route discovery

14pp E 20413 F 20414 S 20415 12 CHF

**G.853.1 (03/99)** Common elements of the information viewpoint for the management of a transport network

60pp E 15961 F 15962 S 15963 29 CHF

**G.853.2 (11/96)** Subnetwork connection management information viewpoint

20pp E 11775 F 11778 S 11779 17 CHF

**G.853.3 (03/99)** Information viewpoint for topology management

16pp E 15778 F 15779 S 15780 12 CHF

G.853.6 (03/99) Information viewpoint for trail management

12pp E 15702 F 15703 S 15704 12 CHF

**G.853.8 (03/99)** Information viewpoint for pre-provisioned adaptation management

20pp E 15883 F 15884 S 15885 17 CHF

**G.853.10 (03/99)** Information viewpoint for pre-provisioned link connection management

12pp E 15889 F 15890 S 15891 12 CHF

**G.853.12 (03/99)** Information viewpoint for pre-provisioned link management

12pp E 15880 F 15881 S 15882 12 CHF

**G.853.16 (01/01)** Information viewpoint for pre-provisioned route discovery

17pp E 20416 F 20417 S 20418 17 CHF

**G.854.1 (11/96)** Computational interfaces for basic transport network model

24pp E 11043 F 11044 S 11045 17 CHF

**G.854.3 (03/99)** Computational viewpoint for topology management

36pp E 15751 F 15752 S 15753 22 CHF

**G.854.6 (03/99)** Computational viewpoint for trail management

32pp E 15760 F 15761 S 15762 17 CHF

**G.854.8 (03/99)** Computational viewpoint for pre-provisioned adaptation management

32pp E 15877 F 15878 S 15879 17 CHF

**G.854.10 (03/99)** Computational viewpoint for pre-provisioned link connection management

20pp E 15754 F 15755 S 15756 17 CHF

**G.854.12 (03/99)** Computational viewpoint for pre-provisioned link management

16pp E 15763 F 15764 S 15765 12 CHF

**G.854.16 (01/01)** Computational viewpoint for pre-provisioned route discovery

18pp E 20473 F 20474 S 20475 12 CHF

**G.855.1 (03/99)** GDMO engineering viewpoint for the generic network level model

30pp E 15934 F 15935 S 15936 17 CHF

SDH radio and satellite systems integration

**G.861 (08/96)** Principles and guidelines for the integration of satellite and radio systems in SDH transport networks

20pp E 10824 F 10825 S 10826 17 CHF

### **Internet protocol aspects**

**Transport** 

G.871/Y.1301 (10/00) Framework of Optical Transport Network Recommendations 15pp E 19928 F 19929 S 19930 12 CHF

#### **Digital networks**

Telecommunications management network

**G.872 (11/01)** Architecture of optical transport networks

72pp E 22537 F 22538 S 22539 34 CHF

**G.874 (11/01)** Management aspects of the optical transport network element

64pp E 22280 F 22281 S 22282 29 CHF

**G.874.1 (01/02)** Optical transport network (OTN): Protocol-neutral management information model for the network element view

67pp E 22338 F 22339 S 22340 29 CHF

# Digital sections and digital line system

General

**G.901 (11/88)** General considerations on digital sections and digital line systems

*Individually through the Electronic Bookshop:* 20 CHF

**G.902 (11/95)** Framework Recommendation on functional access networks (AN) – Architecture and functions, access types, management and service node aspects

44pp E 9545 F 9546 S 9547 22 CHF

Parameters for optical fibre cable systems

**G.911 (04/97)** Parameters and calculation methodologies for reliability and availability of fibre optic systems

36pp E 12157 F 12158 S 12159 22 CHF

Digital sections at hierarchical bit rates based on a bit rate of 2048 kbit/s

**G.921 (11/88)** Digital sections based on the 2048 kbit/s hierarchy

Individually through the Electronic Bookshop: 20 CHF

Digital line transmission systems on cable at non-hierarchical bit rates

#### G.931 (11/88) Withdrawn (05/02)

Digital line sections at 3152 kbit/s

This Recommenation was deleted since no more significant content remained after the removal of the material in its Annex A to new Appendix III/G.703 '3152 kbit/s interface specification for use in North America'.

Digital line systems provided by FDM transmission bearers

**G.941 (11/88)** Digital line systems provided by FDM transmission bearers

*Individually through the Electronic Bookshop:* 20 CHF

Digital line systems

**G.950 (11/88)** General considerations on digital line systems

*Individually through the Electronic Bookshop:* 20 CHF

**G.951 (11/88)** Digital line systems based on the 1544 kbit/s hierarchy on symmetric pair cables

*Individually through the Electronic Bookshop:* 20 CHF

**G.952 (11/88)** Digital line systems based on the 2048 kbit/s hierarchy on symmetric pair cables

*Individually through the Electronic Bookshop:* 20 CHF

**G.953 (11/88)** Digital line systems based on the 1544 kbit/s hierarchy on coaxial pair cables

*Individually through the Electronic Bookshop:* 20 CHF

**G.954 (11/88)** Digital line systems based on the 2048 kbit/s hierarchy on coaxial pair cables

*Individually through the Electronic Bookshop:* 20 CHF

G.955 (11/88) Withdrawn (03/93)

Digital line systems based on the 1544 kbit/s and the 2048 kbit/s hierarchy on optical fibre cables

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

**G.955 (11/96)** Digital line systems based on the 1544 kbit/s and the 2048 kbit/s hierarchy on optical fibre cables

24pp E 11701 F 11702 S 11703 17 CHF

G.956 (11/88) Withdrawn (03/93)

Digital line systems based on the 2048 kbit/s hierarchy on optical fibre cables

The content of this Recommendation is now covered by ITU-T G.955

Individually through the Electronic Bookshop: 20 CHF

**G.957 (07/99)** Optical interfaces for equipments and systems relating to the synchronous digital hierarchy

6pp E 16537 F 16538 S 16539 22 CHF

**G.959.1 (02/01)** Optical transport network physical layer interfaces

50pp E 21376 F 21377 S 21378 22 CHF

Digital section and digital transmission systems for customer access to ISDN

**G.960 (03/93)** Access digital section for ISDN basic rate access

32pp E 3914 F 3913 S 3915 20 CHF

**G.961 (03/93)** Digital transmission system on metallic local lines for ISDN basic rate access

Covering note, 1st August 2000: Corrigendum 1

134pp E 4102 F 4101 S 4103 20 CHF

G.961 erratum (08/00)

**G.962 (03/93)** Access digital section for ISDN primary rate at 2048 kbit/s

51pp E 3841 F 3840 S 3842 24 CHF

**G.962 Amendment 1 (06/97)** Maintenance channel 12pp E 11916 F 11917 S 11918 12 CHF

**G.963 (03/93)** Access digital section for ISDN primary rate at 1544 kbit/s

29pp E 3708 F 3707 S 3709 15 CHF

G.964 (03/01) V-interfaces at the digital local exchange (LE) – V5.1 interface (based on 2048 kbit/s) for the support of access network (AN)

203pp E 21555 F 21556 S 21557 73 CHF

G.965 (03/01) V-interfaces at the digital local exchange (LE) – V5.2 interface (based on 2048 kbit/s) for the support of access network (AN)

196pp E 21615 F 21616 S 21617 73 CHF

**G.966 (02/99)** Access digital section for B-ISDN 28pp E 16003 F 16004 S 16005 17 CHF

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

**G.967.1 (06/98)** V-interfaces at the service node (SN): VB5.1 reference point specification

This Recommendation includes one diskette containing the SDL process diagrams corresponding to the VB5.1 reference point.

192pp E 14280 F 14281 S 14282 12 CHF

**G.967.2 (02/99)** VB5.2 reference point specification

This Recommendation includes one diskette containing the SDL process diagrams corresponding to the VB5.2 reference point.

E 15920 F 15921 S 15922 101 CHF

**G.967.3 (03/00)** Protocol implementation conformance statements for interfaces at VB5 reference points

8pp E 19400 F 19401 S 19402 9 CHF

0 . 1	01	7 .	1 1	
Optical	nbre	submarine	cable	svstems

**G.971 (04/00)** General features of optical fibre submarine cable systems

20pp E 19686 F 19687 S 19688 17 CHF

**G.972 (10/00)** Definition of terms relevant to optical fibre submarine cable systems

24pp E 19906 F 19907 S 19908 17 CHF

**G.973** (11/96) Characteristics of repeaterless optical fibre submarine cable systems

24pp E 11723 F 11724 S 11725 17 CHF

**G.974 (03/93)** Characteristics of regenerative optical fibre submarine cable systems

15pp E 4213 F 4212 S 4214 15 CHF

**G.975 (10/00)** Forward error correction for submarine systems

20pp E 20246 F 20247 S 20248 17 CHF

**G.976 (10/00)** Test methods applicable to optical fibre submarine cable systems

36pp E 19925 F 19926 S 19927 22 CHF

**G.977 (04/00)** Characteristics of optically amplified optical submarine cable systems

40pp E 19689 F 19690 S 19691 22 CHF

# Optical line systems for local and access networks

**G.981 (01/94)** PDH optical line systems for the local network

8pp E 5384 F 5383 S 5385 11 CHF

**G.982 (11/96)** Optical access networks to support services up to the ISDN primary rate or equivalent bit rates

28pp E 11714 F 11715 S 11716 17 CHF

**G.983.1 (10/98)** Broadband optical access systems based on Passive Optical Networks (PON)

116pp E 15705 F 15706 S 15707 49 CHF

**G.983.1 Amendment 1 (11/01)** Amendment 1 20pp E 22001 F 22002 S 22003 12 CHF

G.983.1 Corrigendum 1 (07/99)

**G.983.2 (06/02)** ONT management and control interface specification for ATM PON

To be published...

# G.983.2 Amendment 1 (11/01)

Never published, consolidated in G.983.2 (06/2002) To be published...

#### G.983.2 Amendment 2 (11/01)

Never published, consolidated in G.983.2 (06/2002) To be published...

**G.983.3 (03/01)** A broadband optical access system with increased service capability by wavelength allocation

62pp E 21023 F 21024 S 21025 29 CHF

#### G.983.3 Amendment 1 (06/02)

16pp E 22359 F 22360 S 22361 12 CHF

**G.983.4 (11/01)** A broadband optical access system with increased service capability using dynamic bandwidth assignment

88pp E 22304 F 22305 S 22306 39 CHF

**G.983.5 (01/02)** A broadband optical access system with enhanced survivability

59pp E 22639 F 22640 S 22641 29 CHF

**G.983.6 (06/02)** ONT management and control interface specifications for B-PON system with protection features

24pp E 22720 F 22721 S 22722 17 CHF

**G.983.7 (11/01)** ONT management and control interface specification for dynamic bandwidth assignment (DBA) B-PON system

28pp E 21417 F 21418 S 21419 17 CHF

**G.989.1 (02/01)** Phoneline networking transceivers – Foundation

22pp E 20800 F 20801 S 20802 17 CHF

**G.989.2 (11/01)** Phoneline networking transceivers – Payload format and link layer requirements

65pp E 22065 F 22066 S 22067 29 CHF

#### Access networks

**G.991.1 (10/98)** High bit rate Digital Subscriber Line (HDSL) transceivers

168pp E 16084 F 16085 S 16086 73 CHF

**G.991.2 (02/01)** Single-Pair High-Speed Digital Subscriber Line (SHDSL) transceivers

176pp E 21998 F 21999 S 22000 73 CHF

# G.991.2 Amendment 1 (11/01)

18pp E 22404 F 22405 S 22406 12 CHF

**G.992.1 (07/99)** Asymmetrical digital subscriber line (ADSL) transceivers

252pp E 17821 F 17822 S 17823 96 CHF

**G.992.1 Annex H (10/00)** Specific requirements for a synchronized symmetrical DSL (SSDSL) system operating in the same cable binder as ISDN as defined in G.961 Appendix III

46pp E 19980 F 19981 S 19982 22 CHF

Optical line systems for local and access networks

#### G.992.1 Corrigendum 1 (11/01)

#### G.992.1 Corrigendum 2 (07/02)

**G.992.2 (07/99)** Splitterless asymmetric digital subscriber line (ADSL) transceivers

176pp E 17666 F 17667 S 17668 73 CHF

#### G.992.2 Corrigendum 1 (07/02)

**G.992.3 (07/02)** Asymmetric digital subscriber line transceivers – 2 (ADSL2)

To be published...

**G.992.4 (07/02)** Splitterless asymmetric digital subscriber line transceivers – 2 (Splitterless ADSL2) To be published...

**G.993.1 (11/01)** Very high speed digital subscriber line foundation

52pp E 22274 F 22275 S 22276 22 CHF

# Access networks

**G.994.1 (07/02)** Handshake procedures for digital subscriber line (DSL) transceivers

To be published...

**G.995.1 (02/01)** Overview of digital subscriber line (DSL) Recommendations

36pp E 21048 F 21049 S 21050 17 CHF

Optical line systems for local and access networks

#### G.995.1 Amendment 1 (11/01)

12pp E 21937 F 21938 S 21939 9 CHF

#### Access networks

**G.996.1 (02/01)** Test procedures for digital subscriber line (DSL) transceivers

86pp E 21320 F 21321 S 21322 39 CHF

**G.997.1 (07/99)** Physical layer management for digital subscriber line (DSL) transceivers

48pp E 16540 F 16541 S 16542 22 CHF

# Supplements to Sections 8 and 9 of the Series G Recommendations

#### **Suppl. 27 (10/84)** Interference from external sources

This Supplement is also published as G.500 series supplement in Red Book fascicle III.2

**Suppl. 34 (11/88)** Temperature in underground containers for the installation of repeaters

**Suppl. 35 (11/88)** Guidelines concerning the measurement of wander

**Suppl. 36 (11/88)** Jitter and wander accumulation in digital networks

**Suppl. 37 (10/98)** ITU-T Recommendation G.763 digital circuit multiplication equipment (DCME) tutorial and dimensioning

20pp E 15964 F 15965 S 15966 17 CHF

**Suppl. 38 (10/98)** Variable bit rate calculations for ITU-T Recommendation G.767 Digital Circuit Multiplication Equipment (DCME)

8pp E 14406 F 14407 S 14408 9 CHF

**G.1000 (11/01)** Communications Quality of Service: A framework and definitions

16pp E 21742 F 21743 S 21744 12 CHF

**G.1010 (11/01)** End-user multimedia QoS categories 18pp E 21883 F 21884 S 21885 12 CHF

**G.7041/Y.1303 (12/01)** Generic framing procedure (GFP)

51pp E 22590 F 22591 S 22592 22 CHF

**G.7041/Y.1303 Amendment 1 (06/02)** Amendment 1

12pp E 22726 F 22727 S 22728 9 CHF

**G.7042/Y.1305 (11/01)** Link capacity adjustment scheme (LCAS) for virtual concatenated signals

24pp E 21947 F 21948 S 21949 17 CHF

#### G.7042/Y.1305 Corrigendum 1 (06/02)

**G.7710/Y.1701 (11/01)** Common equipment management function requirements

88pp E 22596 F 22597 S 22598 39 CHF

**G.7712/Y.1703 (11/01)** Architecture and specification of data communication network

45pp E 22599 F 22600 S 22601 22 CHF

**G.7713/Y.1704 (12/01)** Distributed call and connection management (DCM)

74pp E 22912 F 22913 S 22914 34 CHF

**G.7714/Y.1705 (11/01)** Generalized automatic discovery techniques

16pp E 21414 F 21415 S 21416 17 CHF

G.7715/Y.1706 (06/02) Architecture and

Requirements for Routing in the Automatic Switched Optical Networks

36pp E 22748 F 22749 S 22750 17 CHF

**G.8080/Y.1304 (11/01)** Architecture for the automatic switched optical networks (ASON)

48pp E 22221 F 22222 S 22223 22 CHF

**G.8251 (11/01)** The control of jitter and wander within the optical transport network (OTN)

64pp E 22556 F 22557 S 22558 29 CHF

**G.8251 Amendment 1 (06/02)** 

60pp E 22874 F 22875 S 22876 29 CHF

**G.8251 Corrigendum 1 (06/02)** 

#### SERIES H

Audiovisual and multimedia systems

# H.11 (10/84) Withdrawn (06/98)

Characteristics of circuits in the switched telephone network

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### H.12 (10/84) Withdrawn (06/98)

Characteristics of telephone-type leased circuits

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

# H.13 (11/88) Withdrawn (06/98)

Impulsive noise measuring instrument for telephone-type circuits

H.13 was an alias name of ITU-T 0.71. Only this alias name was suppressed. ITU-T 0.71 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### H.14 (10/84) Withdrawn (06/98)

Characteristics of group links for the transmission of wide-spectrum signals

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

# H.15 (10/84) Withdrawn (06/98)

Characteristics of supergroup links for the transmission of wide-spectrum signals

*Individually through the Electronic Bookshop:* 20 CHF

#### H.16 (10/84) Withdrawn (06/98)

Characteristics of an impulsive-noise measuring instrument for wideband data transmission

H.16 was an alias name of ITU-T 0.72. Only this alias name was suppressed. ITU-T 0.72 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### H.21 (10/84) Withdrawn (06/98)

Composition and terminology of international voice-frequency telegraph systems

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### H.22 (10/84) Withdrawn (06/98)

Transmission requirements of international voice-frequency telegraph links (at 50, 100 and 200 bauds)

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

### H.23 (10/84) Withdrawn (06/98)

Basic characteristics of telegraph equipments used in international voice-frequency telegraph systems

This Recommendation was only reproducing for information some characteristics given in ITU-T R.31 and R.35

*Individually through the Electronic Bookshop:* 20 CHF

### H.32 (11/88) Withdrawn (06/98)

Simultaneous communication by telephony and telegraphy on a telephone-type circuit

H.32 was an alias name of ITU-T R.43. Only this alias name was suppressed. ITU-T R.43 remains valid

E 10260 F 10260 S 10260 9 CHF

#### H.34 (10/84) Withdrawn (06/98)

Subdivision of the frequency band of a telephone-type circuit between telegraphy and other services

Deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

#### H.43 (11/88) Withdrawn (06/98)

Document facsimile transmissions on leased telephone-type circuits

H.43 was an alias name of ITU-T T.10. Only this alias name was suppressed. ITU-T T.10 remains valid

9 CHF

#### H.51 (11/88) Withdrawn (06/98)

Power levels for data transmission over telephone lines

H.51 was an alias name of ITU-T V.2. Only this alias name was suppressed. ITU-T V.2 remains valid

9 CHF

#### H.52 (10/84) Withdrawn (06/98)

Transmission of wide-spectrum signals (data, facsimile, etc.) on wideband group links

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### H.53 (10/84) Withdrawn (06/98)

Transmission of wide-spectrum signals (data, etc.) over wideband supergroup links

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

H.100 (11/88) Visual telephone systems

Individually through the Electronic Bookshop: 20 CHF

**H.110 (11/88)** Hypothetical reference connections for videoconferencing using primary digital group transmission

*Individually through the Electronic Bookshop:* 20 CHF

**H.120 (03/93)** Codecs for videoconferencing using primary digital group transmission

60pp E 4311 F 4310 S 4312 24 CHF

**H.130 (11/88)** Frame structures for use in the international interconnection of digital codecs for videoconferencing or visual telephony

*Individually through the Electronic Bookshop:* 20 CHF

**H.140 (11/88)** A multipoint international videoconference system

*Individually through the Electronic Bookshop:* 20 CHF

#### Infrastructure of audiovisual services

# General

**H.200 (03/93)** Framework for Recommendations for audiovisual services

4pp E 3790 F 3789 S 3791 8 CHF

Transmission multiplexing and synchronization

**H.221 (05/99)** Frame structure for a 64 to 1920 kbit/s channel in audiovisual teleservices

Covering note, May 2000: Erratum

48pp E 16658 F 16659 S 16660 22 CHF

**H.221 Erratum (12/00)** Erratum to Recommendation ITU-T H.221 (05/99)

#### H.222 (11/88) Withdrawn (12/90)

Frame structure for 384-1920 kbit/s channels in audiovisual teleservices

Merged with ITU-T H.221 in 1990

Individually through the Electronic Bookshop: 20 CHF

**H.222.0 (02/00)** Information technology – Generic coding of moving pictures and associated audio information: Systems

This edition of ITU-T H.222.0 consolidates H.222.0 (07/1995) and its Amendments 1 and 2 (11/1996), 3 and 4 (02/1998), 5 and 6 (05/1999), 7 (02/2000) and Corrigendum 1 (02/1998)

172pp E 17983 F 17984 S 17985 73 CHF

# Characteristics of visual telephone systems

# H.222.0 Amendment 1 (12/02)

To be published...

#### **H.222.0 Amendment 1 Erratum (01/03)**

To be published...

#### Infrastructure of audiovisual services

H.222.0 (2000) Technical Cor.1 (03/01)

H.222.0 (2000) Technical Cor.2 (03/02)

**H.222.1 (03/96)** Multimedia multiplex and synchronization for audiovisual communication in ATM environments

24pp E 7394 F 7395 S 7396 17 CHF

**H.223 (07/01)** Multiplexing protocol for low bit rate multimedia communication

Available as a prepublished version

76pp E 21543 F 21544 S 21545 22 CHF

H.224 (02/00) A real time control protocol for simplex applications using the H.221 LSD/HSD/HLP channels

20pp E 18714 F 18715 S 18716 17 CHF

H.225.0 (11/00) Call signalling protocols and media stream packetization for packet-based multimedia communication systems

251pp E 21633 F 21634 S 21635 96 CHF

**H.225.0 Amendment 1 (11/02)** Revised Annex G: Communication between administrative domains To be published...

**H.226 (09/98)** Channel aggregation protocol for multilink operation on circuit-switched networks

24pp E 14188 F 14189 S 14190 17 CHF

#### Systems aspects

**H.230 (05/99)** Frame-synchronous control and indication signals for audiovisual systems

24pp E 16586 F 16587 S 16588 17 CHF

**H.231 (07/97)** Multipoint control units for audiovisual systems using digital channels up to 1920 kbit/s

20pp E 12438 F 12439 S 12440 17 CHF

**H.233 (11/02)** Confidentiality system for audiovisual services

To be published...

**H.235 (11/00)** Security and encryption for H-Series (H.323 and other H.245-based) multimedia terminals

96pp E 20612 F 20613 S 20614 39 CHF

Communication procedures

H.235 Annex F (03/02) Hybrid security profile

20pp E 22258 F 22259 S 22260 12 CHF

H.242 (05/99) System for establishing communication between audiovisual terminals using digital channels up to 2 Mbit/s

84pp E 16887 F 16888 S 16889 39 CHF

H.243 (02/00) Procedures for establishing communication between three or more audiovisual terminals using digital channels up to 1920 kbit/s

60pp E 18147 F 18148 S 18149 29 CHF

H.243 Corrigendum 1 (11/00)

**H.244 (07/95)** Synchronized aggregation of multiple 64 or 56 kbit/s channels

28pp E 6467 F 6468 S 6469 15 CHF

**H.245 (02/03)** Control protocol for multimedia communication

To be published...

H.246 (02/98) Interworking of H-Series multimedia terminals with H-Series multimedia terminals and voice/voiceband terminals on GSTN and ISDN

28pp E 13397 F 13398 S 13399 17 CHF

H.246 Annex C (02/00) ISDN User Part Function – H.225.0 Interworking

80pp E 18498 F 18499 S 18500 34 CHF

**H.246 Annex E1 (11/00)** General Inter-Working Function (IWF) between Mobile Application Part and H.225.0

20pp E 21869 F 21870 S 21871 12 CHF

**H.246 Annex E2 (11/00)** Annex E2: ANSI-41 (Americas) Mobile Application Part and H.225.0 interworking

56pp E 21708 F 21709 S 21710 29 CHF

**H.246 Annex F (07/01)** H.323 – H.324 interworking 18pp E 21603 F 21604 S 21605 12 CHF

**H.247 (09/98)** Multipoint extension for broadband audiovisual communication systems and terminals

28pp E 14267 F 14268 S 14269 17 CHF

H.248 (06/00) Gateway control protocol

This Recommendation was renumbered as H.248.1 when revised on 2002-03-29

132pp E 18717 F 18718 S 18719 55 CHF

**H.248 Annex F (11/00)** Facsimile, text conversation and call discrimination packages

This Annex was renumbered as Rec. H.248.2 on 2002-03-29 without further modification

**H.248 Annex G (11/00)** User interface elements and actions packages

This Recommendation was first approved and published as Annex G to H.248, and then renumbered as H.248.3 on 2002-03-29 without further modification

H.248 Annex H (11/00) Transport over SCTP

This Annex was renumbered as Rec. H.248.4 on 2002-03-29 without further modification

H.248 Annex I (11/00) Transport over ATM

This Annex was renumbered as Rec. H.248.5 on 2002-03-29 without further modification

**H.248 Annex J (11/00)** Dynamic Tone Definition package

This Annex was renumbered as Rec. H.248.6 on 2002-03-29 without further modification

**H.248 Annex K (11/00)** Generic Announcement package

This Annex was renumbered as Rec. H.248.7 on 2002-03-29 without further modification

**H.248 Annex M2 (07/01)** Annex M2: Media Gateway resource congestion handling package

This Recommendation was renumbered as H.248.10 on 2002-03-29 without further modification

10pp E 20828 F 20829 S 20830 9 CHF

**H.248 Annex M4 (07/01)** Annex M4: H.248 packages for H.323 and H.324 interworking

30pp E 20891 F 20892 S 20893 17 CHF

**H.248 Supplement 1 (06/01)** H.248 packages guide – Release 1

This Supplement was renumbered as Supplement 2 to H-series Recommendations when revised on 2002-02-15

Freely available on ITU website in electronic format only To be published...

**H.248 Supplement 2 (06/01)** H.248 packages guide release 1 Supplement 2

Available as a prepublished version

To be published...

H.248.1 (05/02) Gateway control protocol

To be published...

**H.248.2 (11/00)** Gateway control protocol: Facsimile, text conversation and call discrimination packages

This Recommendation was first approved and published as Annex F to H.248, and then renumbered as H.248.2 on 2002-03-29 without further modification

48pp E 22613 F 22614 S 22615 22 CHF

**H.248.3 (11/00)** Gateway control protocol: User interface elements and actions packages

This Recommendation was first approved and published as Annex G to H.248, and then renumbered as H.248.3 on 2002-03-29 without further modification

16pp E 22431 F 22432 S 22433 12 CHF

**H.248.4 (11/00)** Gateway control protocol: Transport over Stream Control Transmission Protocol (SCTP)

This Recommendation was first approved and published as Annex H to H.248, and then renumbered as H.248.4 on 2002-03-29 without further modification

8pp E 22434 F 22435 S 22436 9 CHF

**H.248.5 (11/00)** Gateway control protocol: Transport over ATM

This Recommendation was first approved and published as Annex I to H.248, and then renumbered as H.248.5 on 2002-03-29 without further modification

12pp E 21481 F 21482 S 21483 9 CHF

H.248.6 (11/00) Dynamic Tone Definition package

This Recommendation was first approved and published as Annex J to H.248, and then renumbered as H.248.6 on 2002-03-29 without further modification

12pp E 21478 F 21479 S 21480 9 CHF

**H.248.7 (11/00)** Gateway control protocol: Generic announcement package

This Recommendation was first approved and published as Annex K to H.248, and then renumbered as H.248.7 on 2002-03-29 without further modification

11pp E 22169 F 22170 S 22171 9 CHF

**H.248.8 (03/02)** Gateway control protocol: Error code and service change reason description

The former Annex L to H.248 was renumbered as H.248.8 when revised on 2002-03-29

24pp E 22437 F 22438 S 22439 17 CHF

**H.248.9 (03/02)** Gateway control protocol: Advanced media server packages

Drafted as H.248 Annex M1, renumbered and published as H.248.9

52pp E 22379 F 22380 S 22381 22 CHF

**H.248.10 (07/01)** Gateway control protocol: Media gateway resource congestion handling package

This Recommendation was first approved and published as Annex M2 to H.248, and then renumbered as H.248.10 on 2002-03-29 without further modification

9pp E 22160 F 22161 S 22162 9 CHF

**H.248.11 (11/02)** Gateway control protocol: Media gateway overload control package

To be published...

**H.248.12 (07/01)** Gateway control protocol: H.248.1 packages for H.323 and H.324 interworking

This Recommendation was first approved and published as Annex M4 to H.248, and renumbered as H.248.12 on 2002-03-29 without further modification

32pp E 22183 F 22184 S 22185 17 CHF

H.248.12 Amendment 1 (11/02) New Annex A: Extended H.324, H.245 command and H.245 indication packages

To be published...

**H.248.13 (03/02)** Gateway control protocol: Quality Alert Ceasing package

Drafted as H.248 Annex M5, renumbered and published as H.248.13

10pp E 22163 F 22164 S 22165 9 CHF

**H.248.14 (03/02)** Gateway control protocol:

Inactivity timer package

Drafted as H.248 Annex M6, renumbered and published as H.248.14

9pp E 22166 F 22167 S 22168 9 CHF

**H.248.15 (03/02)** Gateway control protocol: SDP H.248 package attribute

Drafted as H.248 Annex N, renumbered and published as H.248.15

12pp E 22277 F 22278 S 22279 9 CHF

**H.248.16 (11/02)** Gateway control protocol: Extended DTMF detection package

To be published...

**H.248.17 (11/02)** Gateway control protocol: Line test package

To be published...

**H.248.18 (11/02)** Gateway control protocol: Package for support of multiple profiles

To be published...

**H.248.20 (11/02)** Gateway control protocol: The use of local and remote descriptors with H.221 & H.223 multiplexing

To be published...

# Coding of moving video

**H.261 (03/93)** Video codec for audiovisual services at p x 64 kbit/s

25pp E 4186 F 4185 S 4187 15 CHF

**H.262 (02/00)** Information technology – Generic coding of moving pictures and associated audio information: Video

This edition of ITU-T H.262 consolidates H.262 (07/1995) and its Amendments 1 and 2 (11/1996), 3 and 4 (02/1998), 5 (05/1999), 6 (02/2000) and Corrigenda 1 and 2 (11/1996)

216pp E 18106 F 18107 S 18108 96 CHF

H.262 Amendment 1 (11/00) Amendment 1: Video elementary stream content description dataCommon text with ISO/IEC

2pp E 19813 F 19814 S 19815 17 CHF

H.262 Amendment 1 Erratum 1 (04/02) Erratum 1

H.262 (2000) Technical Cor. 1 (11/00)

**H.263 (02/98)** Video coding for low bit rate communication

164pp E 13923 F 13924 S 13925 73 CHF

**H.263 Annex U (11/00)** Enhanced reference picture selection mode

40pp E 20590 F 20591 S 20592 22 CHF

**H.263 Annex V (11/00)** Data partitioned slice (DPS) 16pp E 20158 F 20159 S 20160 12 CHF

**H.263 Annex W (11/00)** Additional supplemental enhancement information

24pp E 20150 F 20151 S 20152 22 CHF

**H.263 Annex X (04/01)** Annex X: Profiles and levels definition

22pp E 20777 F 20778 S 20779 17 CHF

**H.263 Appendix II (06/01)** Appendix II: Recommended optional enhancement

**H.263 Appendix III (06/01)** Video coding for low bit rate communication

Appendix III: Examples for H.263 encoder/decoder implementations

52pp E 22010 F 22011 S 22012 22 CHF

#### Related systems aspects

**H.281 (11/94)** A far end camera control protocol for videoconferences using H.224

8pp E 5897 F 5896 S 5898 11 CHF

**H.282 (05/99)** Remote device control protocol for multimedia applications

76pp E 16742 F 16743 S 16744 34 CHF

**H.283 (05/99)** Remote device control logical channel transport

20pp E 16661 F 16662 S 16663 17 CHF

# Systems and terminal equipment for audiovisual services

**H.310 (09/98)** Broadband audiovisual communication systems and terminals

68pp E 14273 F 14274 S 14275 34 CHF

**H.320 (05/99)** Narrow-band visual telephone systems and terminal equipment

32pp E 16664 F 16665 S 16666 17 CHF

**H.321 (02/98)** Adaptation of H.320 visual telephone terminals to B-ISDN environments

28pp E 13459 F 13460 S 13461 17 CHF

**H.322 (03/96)** Visual telephone systems and terminal equipment for local area networks which provide a guaranteed quality of service

8pp E 7316 F 7317 S 7318 9 CHF

# **H.323 (11/00)** Packet-based multimedia communications systems

It includes main text, of Annexes A to G, J, K, L, M.1, M.2 and Appendices I, II, II, IV and V

60pp E 21784 F 21785 S 21786 96 CHF

**H.323 Annex M3 (07/01)** Tunnelling of DSS1 through H.323

Available as a prepublished version

12pp E 21037 F 21038 S 21039 9 CHF

#### Infrastructure of audiovisual services

Systems and terminal equipment for audiovisual services

**H.323 Annex P (01/03)** Transfer of modem signals over H.323

To be published...

**H.323 Annex Q (07/01)** Far-end camera control and H.281/H.224

12pp E 20807 F 20808 S 20809 9 CHF

**H.323 Annex R (07/01)** Robustness methods for H.323 entities

32pp E 21576 F 21577 S 21578 17 CHF

**H.324 (03/02)** Terminal for low bit-rate multimedia communication

78pp E 22325 F 22326 S 22327 34 CHF

H.324 Corrigendum 1 (11/02)

**H.331 (03/93)** Broadcasting type audiovisual multipoint systems and terminal equipment

5pp E 4084 F 4083 S 4085 8 CHF

**H.332 (09/98)** H.323 extended for loosely coupled conferences

24pp E 14308 F 14309 S 14310 17 CHF

**H.341 (05/99)** Multimedia management information base

This Recommendation includes one diskette containing the formal descriptions of Annexes A, B, C, D and E for the multimedia management information base.

E 17360 F 17361 S 17362 50 CHF

# Supplementary services for multimedia

**H.450.1 (02/98)** Generic functional protocol for the support of supplementary services in H.323

24pp E 13262 F 13263 S 13264 17 CHF

**H.450.2 (02/98)** Call transfer supplementary service for H.323

48pp E 13538 F 13539 S 13540 22 CHF

**H.450.3 (02/98)** Call diversion supplementary service for H.323

68pp E 13528 F 13529 S 13530 34 CHF

**H.450.4 (05/99)** Call hold supplementary service for H.323

28pp E 16830 F 16831 S 16832 17 CHF

**H.450.5 (05/99)** Call park and call pickup supplementary services for H.323

Covering note, May 2000: Erratum

56pp E 16908 F 16909 S 16910 29 CHF

# Infrastructure of audiovisual services

Supplementary services for multimedia

**H.450.5 Erratum (05/00)** Erratum to Recommendation ITU-T H.450.5 (05/99)

**H.450.5 Erratum 2 (04/02)** Erratum 2

**H.450.6 (05/99)** Call waiting supplementary service for H.323

16pp E 16776 F 16777 S 16778 12 CHF

**H.450.7 (05/99)** Message waiting indication supplementary service for H.323

28pp E 16911 F 16912 S 16913 17 CHF

**H.450.8 (02/00)** Name identification supplementary service for H.323

12pp E 17818 F 17819 S 17820 12 CHF

**H.450.9 (11/00)** Call Completion Supplementary Services for H.323

66pp E 20267 F 20268 S 20269 29 CHF

**H.450.10 (03/01)** Call offering supplementary services for H.323

30pp E 20706 F 20707 S 20708 17 CHF

**H.450.11 (03/01)** Call intrusion supplementary services

64pp E 20743 F 20744 S 20745 29 CHF

**H.450.12 (07/01)** Common Information Additional Network Feature for H.323

34pp E 21040 F 21041 S 21042 17 CHF

**H.460.1 (03/02)** Guidelines for the use of the generic extensible framework

22pp E 22423 F 22424 S 22425 17 CHF

# Supplementary services for multimedia

H.460.2 (07/01) Number Portability interworking between H.323 and SCN networks

16pp E 20960 F 20961 S 20962 12 CHF

### Supplementary services for multimedia

**H.460.3 (11/02)** Circuit maps within H.323 systems To be published...

**H.460.4 (11/02)** Call Priority Designation for H.323 calls

To be published...

**H.460.5 (11/02)** H.225.0 transport of multiple Q.931 IE of the same type

To be published...

H.460.6 (11/02) Extended Fast Connect featureTo be published...

**H.460.7 (11/02)** Digit maps within H.323 systems To be published...

**H.460.8 (11/02)** Querying for alternate routes within H.323 systems

To be published...

**H.460.9 (11/02)** Support for real-time QoS monitoring

To be published...

# **Mobility and Collaboration procedures**

# **Mobility and Collaboration procedures**

Overview of Mobility and Collaboration, definitions, protocols and procedures

**H.501 (03/02)** Protocol for mobility management and intra/inter-domain communication in multimedia systems

46pp E 22624 F 22625 S 22626 22 CHF

Mobility for H-Series multimedia systems and services

**H.510 (03/02)** Mobility for H.323 multimedia systems and services

34pp E 22548 F 22549 S 22550 17 CHF

Security for mobile multimedia collaboration applications and services

**H.530 (03/02)** Symmetric security procedures for H.323 mobility in H.510

30pp E 22542 F 22543 S 22544 17 CHF

# **Supplements to the Series H Recommendations**

**Suppl. 1 (05/99)** Application profile – Sign language and lip-reading real-time conversation using low bit-rate video communication

This Supplement includes one CD-ROM containing the video clip 'Irene' to be used as test material for video coding of sign language.

16pp E 16654 F 16655 S 16656 137 CHF

**Suppl. 2 (02/03)** H.248.1 packages guide – Release 2

The former Supplement 1 to Rec. H.248 was renumbered as Supplement 2 to H-series Recommendations when revised on 2002-02-15. Freely available on ITU website in electronic format only

18pp E 22464 F 22465 S 22466 9 CHF

### SERIES I

# Integrated services digital network

# **General structure**

#### **Terminology**

# I.110 (11/88) Withdrawn (03/93)

Preamble and general structure of the I-Series Recommendations for the integrated services digital network (ISDN)

Deleted after its content became technically out of date
Individually through the Electronic Bookshop: 20 CHF

#### I.111 (11/88) Withdrawn (03/93)

Relationship with other Recommendations relevant to ISDNs

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

I.112 (03/93) Vocabulary of terms for ISDNs

16pp E 3844 F 3843 S 3845 15 CHF

I.112 Appendix I (02/02) General

telecommunication terminology and definitions

8pp E 22198 F 22199 S 22201 9 CHF

**I.113 (06/97)** Vocabulary of terms for broadband aspects of ISDN

32pp E 11687 F 11688 S 11689 17 CHF

**I.114 (03/93)** Vocabulary of terms for universal personal telecommunication

4pp E 3726 F 3725 S 3727 8 CHF

### Description of ISDNs

I.120 (03/93) Integrated services digital networks (ISDNs)

2pp E 3814 F 3813 S 3815 8 CHF

I.121 (04/91) Broadband aspects of ISDN

2pp E 2009 F 2008 S 2010 7 CHF

**I.122 (03/93)** Framework for frame mode bearer services

1pp E 3655 F 3654 S 3656 8 CHF

#### General modelling methods

**I.130 (11/88)** Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN

*Individually through the Electronic Bookshop:* 20 CHF

# Telecommunication network and service attributes

**I.140 (03/93)** Attribute technique for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN

16pp E 4032 F 4031 S 4033 15 CHF

**I.141 (11/88)** ISDN network charging capabilities attributes

*Individually through the Electronic Bookshop:* 20 CHF

# General description of asynchronous transfer mode

**I.150 (02/99)** B-ISDN asynchronous transfer mode functional characteristics

16pp E 16116 F 16117 S 16118 12 CHF

# Service capabilities

Scope

**I.200 (11/88)** Guidance to the I.200-Series of Recommendations

*Individually through the Electronic Bookshop:* 20 CHF

General aspects of services in ISDN

**I.210 (03/93)** Principles of telecommunication services supported by an ISDN and the means to describe them

28pp E 3902 F 3901 S 3903 15 CHF

I.211 (03/93) B-ISDN service aspects

13pp E 3802 F 3801 S 3803 11 CHF

Common aspects of services in the ISDN

**I.220 (11/88)** Common dynamic description of basic telecommunication services

Individually through the Electronic Bookshop: 20 CHF

**I.221 (03/93)** Common specific characteristics of services

4pp E 3805 F 3804 S 3806 8 CHF

Bearer services supported by an ISDN

**I.230 (11/88)** Definition of bearer service categories

Individually through the Electronic Bookshop: 20 CHF

I.231 Circuit-mode bearer service categories

**I.231.1 (11/88)** Circuit-mode 64 kbit/s unrestricted, 8 kHz structured bearer service

*Individually through the Electronic Bookshop:* 20 CHF

**I.231.2 (11/88)** Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for speech information transfer

*Individually through the Electronic Bookshop:* 20 CHF

**I.231.3 (11/88)** Circuit-mode 64 kbit/s, 8 kHz structured bearer service usable for 3.1 kHz audio information transfer

Individually through the Electronic Bookshop: 20 CHF

**I.231.4 (11/88)** Circuit-mode, alternate speech / 64 kbit/s unrestricted, 8 kHz structured bearer service

Individually through the Electronic Bookshop: 20 CHF

**I.231.5 (11/88)** Circuit-mode 2 × 64 kbit/s unrestricted, 8 kHz structured bearer service

Individually through the Electronic Bookshop: 20 CHF

**I.231.6 (07/96)** Circuit-mode 384 kbit/s unrestricted, 8 kHz structured bearer service

8pp E 9600 F 9607 S 9608 9 CHF

**I.231.7 (07/96)** Circuit-mode 1536 kbit/s unrestricted, 8 kHz structured bearer service

8pp E 9609 F 9610 S 9611 9 CHF

**I.231.8 (07/96)** Circuit-mode 1920 kbit/s unrestricted, 8 kHz structured bearer service

8pp E 9612 F 9613 S 9614 9 CHF

**I.231.9 (03/93)** Circuit-mode 64 kbit/s 8 kHz structured multi-use bearer service

6pp E 4180 F 4179 S 4181 11 CHF

**I.231.10 (08/92)** Circuit-mode multiple-rate unrestricted 8 kHz structured bearer service

5pp E 2915 F 2911 S 2919 8 CHF

I.232 Packet-mode bearer services categories

**I.232.1 (11/88)** Virtual call and permanent virtual circuit bearer service category

*Individually through the Electronic Bookshop:* 20 CHF

**I.232.2** (11/88) Connectionless bearer service category

Empty Recommendation Note – This connectionless bearer service category is a different concept from, and should not be confused with, the OSI Connectionless Mode Network Service. Thus, the name of this service may change as the service is better defined. Further aspects of this bearer service category are for further study.

This service has only been identified and requires further study

**I.232.3 (03/93)** User signalling bearer service category (USBS)

13pp E 4216 F 4215 S 4217 11 CHF

1.233 Frame mode bearer services

**I.233.1 (10/91)** ISDN frame relaying bearer service *Published with ITU-T 1.233.2*.

34pp E 2597 F 2633 S 2664 20 CHF

I.233.1 Annex F (07/96) Frame relay multicast

16pp E 7326 F 7327 S 7328 12 CHF

**I.233.2 (10/91)** ISDN frame switching bearer service *Published with ITU-T I.233.1*.

18pp E 2597 F 2633 S 2664 20 CHF

**I.240 (11/88)** Definition of teleservices

1.241 Teleservices supported by an ISDN	<b>1.251.9 (07/96)</b> Calling name identification			
<b>I.241.1 (11/88)</b> Telephony	presentation 16pp E 7397 F 7398 S 7399 12 CHF			
Individually through the Electronic Bookshop: 20 CHF	••			
I.241.2 (11/88) Teletex	<b>I.251.10 (07/96)</b> Calling name identification restriction			
Individually through the Electronic Bookshop: 20 CHF	16pp E 7362 F 7363 S 7364 12 CHF			
I.241.3 (11/88) Telefax 4  Individually through the Electronic Bookshop: 20 CHF	1.252 Call offering supplementary services			
<b>I.241.4 (11/88)</b> Mixed mode	<b>I.252.1 (11/88)</b> Call Transfer			
Individually through the Electronic Bookshop: 20 CHF	Individually through the Electronic Bookshop: 20 CHF			
I.241.5 (11/88) Videotex Individually through the Electronic Bookshop: 20 CHF	<b>1.252.2 (08/92)</b> Call Forwarding Busy 15pp E 2895 F 2892 S 2898 11 CHF			
<b>I.241.6 (11/88)</b> Telex	<b>1.252.3 (08/92)</b> Call Forwarding No Reply			
Individually through the Electronic Bookshop: 20 CHF	9pp E 2896 F 2893 S 2899 11 CHF			
<b>1.241.7 (03/93)</b> Telephony 7 kHz teleservice 5pp E 3868 F 3867 S 3869 8 CHF	1.252.4 (08/92) Call Forwarding Unconditional			
<b>I.241.8 (10/95)</b> Teleaction stage one service	11pp E 2897 F 2894 S 2900 11 CHF			
description	<b>1.252.5 (08/92)</b> Call Deflection			
16pp E 6503 F 6504 S 6505 11 CHF	9pp E 2903 F 2901 S 2905 11 CHF			
Supplementary services in ISDN	<b>I.252.6 (11/88)</b> Call offering supplementary services: Line Hunting (LH)			
<b>1.250 (11/88)</b> Definition of supplementary services <i>Individually through the Electronic Bookshop:</i> 20 CHF	Individually through the Electronic Bookshop: 20 CHF			
1251 Number identification supplementary	<b>1.252.7 (05/97)</b> Explicit call transfer			
I.251 Number identification supplementary services	<b>1.252.7 (05/97)</b> Explicit call transfer  16pp E 12144 F 12145 S 12146 12 CHF			
	• •			
services	16pp E 12144 F 12145 S 12146 12 CHF			
services         1.251.1 (08/92)       Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         1.251.2 (08/92)       Multiple Subscriber Number	16pp E 12144 F 12145 S 12146 12 CHF  1.253 Call completion supplementary services  1.253.1 (11/88) Call waiting (CW) supplementary service			
services         I.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         I.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF			
services         1.251.1 (08/92)       Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         1.251.2 (08/92)       Multiple Subscriber Number	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         I.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold			
services         1.251.1 (08/92)       Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         1.251.2 (08/92)       Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         1.251.3 (08/92)       Calling Line Identification	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         I.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF			
services         I.251.1 (08/92)       Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92)       Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92)       Calling Line Identification         Presentation         9pp       E 2827       F 2792       S 2862       11 CHF         I.251.4 (08/92)       Calling Line Identification	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         I.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold			
services         I.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92) Calling Line Identification         Presentation         9pp       E 2827       F 2792       S 2862       11 CHF	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy			
services         I.251.1 (08/92)       Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92)       Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92)       Calling Line Identification         Presentation       9pp       E 2827       F 2792       S 2862       11 CHF         I.251.4 (08/92)       Calling Line Identification         Restriction	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply			
services         1.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         1.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         1.251.3 (08/92) Calling Line Identification         Presentation       Ppp       E 2827       F 2792       S 2862       11 CHF         1.251.4 (08/92) Calling Line Identification         Restriction       16pp       E 2832       F 2797       S 2867       7 CHF         1.251.5 (02/95) Connected Line Identification         Presentation (COLP)	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         I.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF			
services         1.251.1 (08/92)       Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         1.251.2 (08/92)       Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         1.251.3 (08/92)       Calling Line Identification         Presentation       9pp       E 2827       F 2792       S 2862       11 CHF         1.251.4 (08/92)       Calling Line Identification         Restriction       16pp       E 2832       F 2797       S 2867       7 CHF         1.251.5 (02/95)       Connected Line Identification         Presentation (COLP)       7pp       E 5900       F 5899       S 5901       11 CHF	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply			
services         1.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         1.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         1.251.3 (08/92) Calling Line Identification         Presentation       Ppp       E 2827       F 2792       S 2862       11 CHF         1.251.4 (08/92) Calling Line Identification         Restriction       16pp       E 2832       F 2797       S 2867       7 CHF         1.251.5 (02/95) Connected Line Identification         Presentation (COLP)	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply 24pp       E 7400       F 7401       S 7402       17 CHF			
services         I.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92) Calling Line Identification         Presentation       Person E 2827       F 2792       S 2862       11 CHF         I.251.4 (08/92) Calling Line Identification         Restriction       16pp       E 2832       F 2797       S 2867       7 CHF         I.251.5 (02/95) Connected Line Identification         Presentation (COLP)       7pp       E 5900       F 5899       S 5901       11 CHF         I.251.6 (02/95) Connected Line Identification	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         I.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply 24pp       E 7400       F 7401       S 7402       17 CHF         I.254 Multiparty supplementary services			
services         I.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92) Calling Line Identification         Presentation       Ppp       E 2827       F 2792       S 2862       11 CHF         I.251.4 (08/92) Calling Line Identification         Restriction       16pp       E 2832       F 2797       S 2867       7 CHF         I.251.5 (02/95) Connected Line Identification         Presentation (COLP)       7pp       E 5900       F 5899       S 5901       11 CHF         I.251.6 (02/95) Connected Line Identification       Restriction (COLR)       6pp       E 5903       F 5902       S 5904       8 CHF         I.251.7 (08/92) Malicious call Identification	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply 24pp       E 7400       F 7401       S 7402       17 CHF         I.254 Multiparty supplementary services         I.254.1 (11/88)       Conference calling (CONF)			
I.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92) Calling Line Identification         Presentation         9pp       E 2827       F 2792       S 2862       11 CHF         I.251.4 (08/92) Calling Line Identification         Restriction         16pp       E 2832       F 2797       S 2867       7 CHF         I.251.5 (02/95) Connected Line Identification         Presentation (COLP)         7pp       E 5900       F 5899       S 5901       11 CHF         I.251.6 (02/95) Connected Line Identification         Restriction (COLR)         6pp       E 5903       F 5902       S 5904       8 CHF         I.251.7 (08/92) Malicious call Identification         8pp       E 2825       F 2790       S 2860       8 CHF	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply 24pp       E 7400       F 7401       S 7402       17 CHF         I.254 Multiparty supplementary services         I.254.1 (11/88)       Conference calling (CONF)         Individually through the Electronic Bookshop:       20 CHF			
services         I.251.1 (08/92) Direct-dialling-In         4pp       E 2831       F 2796       S 2866       8 CHF         I.251.2 (08/92) Multiple Subscriber Number         5pp       E 2824       F 2789       S 2859       8 CHF         I.251.3 (08/92) Calling Line Identification         Presentation       Ppp       E 2827       F 2792       S 2862       11 CHF         I.251.4 (08/92) Calling Line Identification         Restriction       16pp       E 2832       F 2797       S 2867       7 CHF         I.251.5 (02/95) Connected Line Identification         Presentation (COLP)       7pp       E 5900       F 5899       S 5901       11 CHF         I.251.6 (02/95) Connected Line Identification       Restriction (COLR)       6pp       E 5903       F 5902       S 5904       8 CHF         I.251.7 (08/92) Malicious call Identification	16pp       E 12144       F 12145       S 12146       12 CHF         I.253 Call completion supplementary services         1.253.1 (11/88)       Call waiting (CW) supplementary service         12pp       E 1896       F 1895       S 1897       10 CHF         I.253.2 (08/92)       Call Hold         8pp       E 2883       F 2875       S 2891       8 CHF         I.253.3 (07/96)       Completion of calls to busy subscribers         28pp       E 7424       F 7425       S 7426       17 CHF         I.253.4 (07/96)       Completion of calls on no reply 24pp       E 7400       F 7401       S 7402       17 CHF         I.254 Multiparty supplementary services         I.254.1 (11/88)       Conference calling (CONF)         Individually through the Electronic Bookshop:       20 CHF         I.254.2 (08/92)       Three-Party Supplementary Service			

services	2 3		11		**				
I.255.1 (08)	/ <b>92</b> ) Close	ed User Gi	oup		Suppl. 1 (03/			description in I.250 – S	
14pp	E 2916	F 2912	S 2920	11 CHF	Recommen				
1.255.2 (07)	/ <b>96)</b> Supp	ort of Priv	ate Numberii	ng Plans	32pp	E 13516	F 13517	S 13518	17 CHF
12pp	E 7499	F 7500	S 7501	12 CHF	Overall net	work as	nects and	functions	
1.255.3 (07)	/ <b>90)</b> Mult	i-level pre	cedence and		o verum nee	Work as	pects time		
preemptio	on service (	MLPP)			Network fun	ictional p	orinciples		
9pp	E 1899	F 1898	S 1900	10 CHF	I.310 (03/93)	ISDN -	– Network	functional r	rincinles
I.255.4 (07)	/ <b>90)</b> Prior	ity service			18pp	E 3874	F 3873	S 3875	15 CHF
6pp	E 1902	F 1901	S 1903	7 CHF					
1.255.5 (08/	/ <b>92</b> ) Outg	oing call b	arring		I.311 (08/96)		•	network asp	
6рр	E 2917	F 2913	S 2921	8 CHF	40pp	E 11046	F 11047	S 11048	22 CHF
I.256 Charging supplementary services				I.311 Amendment 1 (03/00)					
	0 0 11				4pp	E 19320	F 19321	S 19322	9 CHF
I.256.1 (11/88) Credit Card Calling (CRED)  Empty Recommendation. This subject has only been			I.312/Q.1201			s of intellige	ent		
identified and is left for further study.  Individually through the Electronic Bookshop: 20 CHF			20 CHF	network architecture  This Recommendation is published with the double number					
	3/93) Adv		rge: charging		<i>Q.1201 and</i> 37pp	<i>I.312</i> E 3246	F 3245	S 3247	20 CHF
9pp	E 4207	F 4206	S 4208	11 CHF	I.313 (09/97)	B-ISD	N network	requiremen	ts
	<b>3/93)</b> Adon during t		rge: charging OC-D)	5	40pp	E 12490	F 12491	S 12492	22 CHF
8pp	E 4210	F 4209	S 4211	11 CHF	Reference m	nodels			
<b>I.256.2c (03/93)</b> Advice of charge: charging information at the end of the call (AOc-E)			I.320 (11/93) ISDN protocol reference model						
7pp	E 4219	F 4218	S 4220	11 CHF	15pp	E 5175	F 5229	S 5264	11 CHF
<b>I.256.3 (08/92)</b> Reverse charging				<b>I.321 (04/91)</b> B-ISDN protocol reference model and its application					
10pp	E 2986	F 2979	S 2993	11 CHF	Covering no		00: Erratun	ı	
I.257 Addi	itional info	ormation t	ransfer		7pp	E 2054	F 2053	S 2055	10 CHF
<b>I.257.1</b> (10)	/ <b>95)</b> User E 6518	-to-User S	ignalling (UU S 6520	JS) 15 CHF	<b>I.322 (02/99)</b> telecommu			reference m	odel for
20рр	2 03 10	1 0317	5 0320	10 0111	20pp	E 15611	F 15612	S 15613	17 CHF
I.258 Mob services	ility and n	iodificatio	on suppleme	ntary	I.324 (10/91)				
I.258.1 (10)	/ <b>05</b> ) Term	ninal nortal	oility (TP)		17pp	E 2599	F 2628	S 2659	15 CHF
12pp	E 6612	F 6613	S 6614	11 CHF	I.325 (03/93)		nce configu	urations for	ISDN
I.258.2 (02)	/ <b>95</b> ) In-ca	ll modifica	ation (IM)		connection		<b></b>	0.000	
12pp	E 5906	F 5905	S 5907	11 CHF	13pp	E 3905	F 3904	S 3906	11 CHF
I.259 Screening supplementary services			I.326 (11/88) Withdrawn (03/93) Reference configuration for relative network						
I.259.1 (07)	· ·				resource re	_			
12pp	E 7427	F 7428	S 7429	12 CHF	Deleted afte	r its conten	it became te	chnically out	of date

**Supplements to the Series I Recommendations** 

I.255 Community of interest supplementary

**62** 

ITU-T 02/03 - Series I

networks based on ATM connection processing delays in an ISDN E 7042 F 7043 S 7044 17 CHF 20pp E 3877 F 3876 S 3878 15 CHF 19pp **I.327 (03/93)** B-ISDN functional architecture S 3872 E 3871 F 3870 11 CHF 11pp **I.353 (08/96)** Reference events for defining ISDN and B-ISDN performance parameters I.328/Q.1202 (09/97) Intelligent network - Service plane architecture S 10020 17 CHF 20pp E 10018 F 10019 This Recommendation is published with the double number Q.1202 and I.328 **I.354 (03/93)** Network performance objectives for E 12967 F 12968 S 12969 17 CHF packet-mode communication in an ISDN **I.329/Q.1203 (09/97)** Intelligent network – Global 11 CHF E 3637 F 3636 S 3638 9pp functional plane architecture This Recommendation is published with the double number Q.1203 and I.329. For more details see I.329 I.355 (10/00) ISDN 64 kbit/s connection type E 12911 F 12912 S 12913 12 CHF availability performance 16pp I.330 (11/88) ISDN numbering and addressing E 19179 F 19180 S 19181 17 CHF 28pp principles 20 CHF *Individually through the Electronic Bookshop:* I.356 (03/00) B-ISDN ATM layer cell transfer performance Numbering, addressing and routing 64pp E 19773 F 19774 S 19775 29 CHF **I.331 (05/97)** The international public telecommunication numbering plan I.357 (11/00) B-ISDN semi-permanent connection This Recommendation is published under alias number availability E 164 E 11877 F 11878 S 11879 17 CHF E 19909 F 19910 S 19911 12 CHF 16pp **I.333 (03/93)** Terminal selection in ISDN E 4072 F 4071 S 4073 20 CHF 32pp **I.358 (06/98)** Call processing performance for switched Virtual Channel Connections (VCCs) in a **I.334 (11/88)** Principles relating ISDN **B-ISDN** numbers/sub-addresses to the OSI reference model network layer addresses 36pp E 13920 F 13921 S 13922 22 CHF Individually through the Electronic Bookshop: 20 CHF **I.359 (02/99)** Accuracy and dependability of ISDN I.335 (11/88) Withdrawn (10/92) 64 kbit/s circuit-mode connection types ISDN routing principles Superseded by ITU-T E.172 (1992) 12pp E 15576 F 15577 S 15578 12 CHF Individually through the Electronic Bookshop: 20 CHF Protocol layer requirements Connection types I.340 (11/88) ISDN connection types **I.361 (02/99)** B-ISDN ATM layer specification Individually through the Electronic Bookshop: 20 CHF E 16113 F 16114 S 16115 22 CHF 40pp Performance objectives I.362 (03/93) Withdrawn (06/97) **I.350 (03/93)** General aspects of quality of service B-ISDN ATM adaptation layer (AAL) functional and network performance in digital networks, description including ISDNs E 3829 F 3828 S 3830 11 CHF 13pp Deleted, since the service classes defined therein were no longer appropriate and were in conflict with F-Series **I.351/Y.801/Y.1501 (10/00)** Relationships among Recommendations ISDN, Internet protocol, and GII performance recommendations 3pp E 3658 F 3657 S 3659 8 CHF E 18937 F 18938 S 18939 17 CHF 24pp

**I.326 (11/95)** Functional architecture of transport

**I.352 (03/93)** Network performance objectives for

I.363 B-ISDN ATM Adaptation Layer (AAL) General network requirements and functions specification **I.370 (10/91)** Congestion management for the ISDN frame relaying bearer service **I.363.1 (08/96)** Type 1 AAL E 2354 F 2332 S 2376 12 CHF E 11626 F 11627 S 11628 22 CHF 10pp 44pp I.371 (03/00) Traffic control and congestion control **I.363.2 (11/00)** B-ISDN ATM Adaptation Layer in B-ISDN specification: Type 2 AAL E 19872 F 19873 S 19874 121pp 49 CHF E 20401 F 20402 S 20403 **29 CHF** 60pp **I.363.3 (08/96)** Type 3/4 AAL I.371.1 (06/97) **Withdrawn (10/00)** Traffic control and congestion control in B-ISDN: 56pp E 11170 F 11171 S 11172 **29 CHF** conformance definitions for ABT and ABR Deleted, its content having been integrated in ITU-T 1.371 **I.363.5 (08/96)** Type 5 AAL (03/2000)E 11192 F 11193 S 11194 22 CHF 48pp 32pp E 11802 F 11803 S 11804 17 CHF **I.364 (02/99)** Support of the broadband **I.371.1** (11/00) Guaranteed frame rate ATM transfer connectionless data bearer service by the B-ISDN capability 84pp E 15886 F 15887 S 15888 39 CHF E 20161 F 20162 S 20163 17 CHF 22pp I.365 B-ISDN ATM adaptation layer sublayers I.372 (03/93) Frame relaying bearer service network-to-network interface requirements **I.365.1 (11/93)** Frame relaying service specific 10pp E 3808 F 3807 S 3809 11 CHF convergence sublayer (FR-SSCS) E 5189 F 5237 S 5272 11 CHF I.373 (03/93) Network capabilities to support universal personal telecommunication (UPT) **I.365.2 (11/95)** Service-specific coordination 16pp E 3799 F 3798 S 3800 15 CHF function to provide the connection-oriented network service I.374 (03/93) Withdrawn (06/98) 104pp E 7281 F 7282 S 7284 44 CHF Framework Recommendation on "network capabilities to support multimedia services" **I.365.3 (11/95)** Service-specific coordination Replaced by ITU-T 1.375.1 and ITU-T 1.375.2 function to provide the connection-oriented transport service E 3820 F 3819 S 3821 11 CHF 7pp E 7160 F 7161 S 7162 **34 CHF** 84pp I.375 Network capabilities to support multimedia **I.365.4 (08/96)** Service-specific convergence services sublayer for HDLC applications I.375.1 (06/98) General aspects E 11015 F 11016 S 11017 12 CHF 12pp E 13488 F 13489 S 13490 17 CHF 16pp **I.366.1 (06/98)** Segmentation and Reassembly Service Specific Convergence Sublayer for the AAL **I.375.2 (06/98)** Example of multimedia retrieval type 2 service class - Video-on-demand service using an ATM based network E 13820 F 13821 S 13822 22 CHF 36pp E 13592 F 13593 S 13594 28pp **17 CHF** I.366.1 Corrigendum 1 (02/02) **I.375.3 (03/00)** Example of multimedia distribution To be published... service class - Switched digital broadcasting **I.366.2 (11/00)** AAL type 2 service specific E 19442 F 19443 S 19444 12 CHF 12pp convergence sublayer for narrow-band services **I.376 (03/95)** ISDN network capabilities for the 130pp E 20196 F 20197 S 20198 49 CHF

support of the teleaction service

E 5912

14pp

F 5911

S 5913

11 CHF

**I.366.2 Corrigendum 1 (03/02)** 

64

**I.377 (10/00)** Network requirements to support charging and accounting in B-ISDN

16pp E 18903 F 18904 S 18905 12 CHF

**I.378 (12/02)** Traffic control and congestion control at the ATM Adaptation Layer type 2

To be published...

**I.381 (03/01)** ATM Adaptation Layer (ALL) performance

32pp E 20625 F 20626 S 20627 17 CHF

#### ISDN user-network interfaces

**I.410 (11/88)** General aspects and principles relating to Recommendations on ISDN user-network interfaces

*Individually through the Electronic Bookshop:* 20 CHF

**I.411 (03/93)** ISDN user-network interfaces – Reference configurations

7pp E 3880 F 3879 S 3881 11 CHF

**I.412 (11/88)** ISDN user-network interfaces – Interface structures and access capabilities

*Individually through the Electronic Bookshop:* 20 CHF

**I.413 (03/93)** B-ISDN user-network interface

9pp E 3908 F 3907 S 3909 11 CHF

**I.414 (09/97)** Overview of Recommendations on Layer 1 for ISDN and B-ISDN customer accesses

20pp E 12493 F 12494 S 12495 17 CHF

Application of I-series Recommendations to ISDN user-network interfaces

**I.420 (11/88)** Basic user-network interface

Individually through the Electronic Bookshop: 20 CHF

**I.421 (11/88)** Primary rate user-network interface

*Individually through the Electronic Bookshop:* 20 CHF

# Layer 1 Recommendations

**I.430 (11/95)** Basic user-network interface – Layer 1 specification

100pp E 6937 F 6938 S 6939 39 CHF

**I.431 (03/93)** Primary rate user-network interface – Layer 1 specification

39pp E 3950 F 3949 S 3951 20 CHF

I.431 Amendment 1 (06/97)

4pp E 11690 F 11691 S 11692 9 CHF

I.432 B-ISDN User-Network Interface – Physical layer specification

I.432.1 (02/99) General characteristics

20pp E 15573 F 15574 S 15575 17 CHF

**I.432.2 (02/99)** 155 520 kbit/s and 622 080 kbit/s operation

40pp E 16180 F 16181 S 16182 22 CHF

**I.432.3 (02/99)** 1544 kbit/s and 2048 kbit/s operation

16pp E 15470 F 15471 S 15472 12 CHF

**I.432.4 (02/99)** 51 840 kbit/s operation

20pp E 15455 F 15456 S 15457 17 CHF

**I.432.5 (06/97)** 25 600 kbit/s operation

28pp E 11729 F 11730 S 11731 17 CHF

### Layer 2 Recommendations

**I.440 (03/93)** ISDN user-network interface data link layer – General aspects

This Recommendation is published under alias number 0.920

#### I.440 Amendment 1 (06/00)

To be published...

# Digital subscriber Signalling System No. 1

**I.441 (09/97)** ISDN user-network interface – Data link layer specification

This Recommendation is published under alias number Q.921.

268pp E 13327 F 13328 S 13329 96 CHF

### ISDN user-network interfaces

# I.441 Amendment 1 (06/00)

To be published...

# Layer 3 Recommendations

**I.450 (03/93)** ISDN user-network interface layer 3 – General aspects

This Recommendation is published under alias number Q.930.

**I.451 (05/98)** ISDN user-network interface layer 3 specification for basic call control

This Recommendation is published under alias number Q.931.

I.452 (05/98) Digital subscriber signalling system
No. 1 – Generic procedures for the control of ISDN supplementary services

This Recommendation is published under alias number Q.932.

Multiplexing, rate adaption and support of existing interfaces

**I.460 (02/99)** Multiplexing, rate adaption and support of existing interfaces

8pp E 14757 F 14758 S 14759 9 CHF

**I.461 (03/93)** Support of X.21, X.21 bis and X.20 bis based Data Terminal Equipments (DTEs) by an Integrated Services Digital Network (ISDN)

This Recommendation is published under alias number X.30.

**I.462 (11/95)** Support of packet mode terminal equipment by an ISDN

This Recommendation is published under alias number X.31.

**I.463 (02/00)** Support by an ISDN of data terminal equipments with V-Series type interfaces

This Recommendation is published under alias number V.110.

**I.464 (02/99)** Multiplexing, rate adaption and support of existing interfaces for restricted 64 kbit/s transfer capability

8pp E 14760 F 14761 S 14762 9 CHF

**I.465 (10/96)** Support by an ISDN of data terminal equipment with V-Series type interfaces with provision for statistical multiplexing

This Recommendation is published under alias number V.120

Aspects of ISDN affecting terminal requirements

**I.470 (11/88)** Relationship of terminal functions to ISDN

Individually through the Electronic Bookshop: 20 CHF

**I.480 (03/00)** 1+1 protection switching for cell-based physical layer

16pp E 19692 F 19693 S 19694 12 CHF

### **Internetwork interfaces**

**I.500 (03/93)** General structure of the ISDN interworking Recommendations

4pp E 3929 F 3928 S 3930 8 CHF

**I.501 (03/93)** Service interworking

8pp E 3781 F 3780 S 3782 11 CHF

**I.510 (03/93)** Definitions and general principles for ISDN interworking

12pp E 3911 F 3910 S 3912 11 CHF

**I.511 (11/88)** ISDN-to-ISDN layer 1 internetwork interface

*Individually through the Electronic Bookshop:* 20 CHF

**I.515 (03/93)** Parameter exchange for ISDN interworking

15pp E 4017 F 4016 S 4018 15 CHF

**I.520 (03/93)** General arrangements for network interworking between ISDNs

12pp E 3932 F 3931 S 3933 11 CHF

**1.525 (08/96)** Interworking between networks operating at bit rates less than 64 kbit/s with 64 kbit/s-based ISDN and B-ISDN

20pp E 11033 F 11034 S 11035 17 CHF

**I.530 (03/93)** Network interworking between an ISDN and a public switched telephone network (PSTN)

10pp E 3938 F 3937 S 3939 11 CHF

**I.540 (10/96)** General arrangements for interworking between Circuit-Switched Public Data Networks (CSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services

This Recommendation is published under alias number X.321

**I.550 (10/96)** General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services

This Recommendation is published under alias number X.325

**I.555 (09/97)** Frame Relaying Bearer Service interworking

40pp E 12595 F 12596 S 12597 22 CHF

**I.560 (03/93)** Technical requirements to be met in providing the international telex service within an integrated services digital network

This Recommendation is published under alias number U.202

**I.570 (03/93)** Public/private ISDN interworking

7pp E 3763 F 3762 S 3764 11 CHF

**I.571 (08/96)** Connection of VSAT based private networks to the public ISDN

36pp E 10839 F 10840 S 10841 22 CHF

**I.572 (03/00)** VSAT interconnection with the PSTN

92pp E 19608 F 19609 S 19610 39 CHF

**I.580 (11/95)** General arrangements for interworking between B-ISDN and 64 kbit/s based ISDN

32pp E 6811 F 6812 S 6813 17 CHF

**I.581 (09/97)** General arrangements for B-ISDN interworking

16pp E 12522 F 12523 S 12524 12 CHF

# Maintenance principles

**I.601 (11/88)** General maintenance principles of ISDN subscriber access and subscriber installation

*Individually through the Electronic Bookshop:* 20 CHF

**I.610 (02/99)** B-ISDN operation and maintenance principles and functions

84pp E 16387 F 16388 S 16389 39 CHF

I.610 Amendment 1 (03/00)

4pp E 19512 F 19513 S 19514 9 CHF

### I.610 Corrigendum 1 (03/00)

**I.620 (10/96)** Frame relay operation and maintenance principles and functions

12pp E 10827 F 10828 S 10829 12 CHF

**I.630 (02/99)** ATM protection switching

40pp E 16065 F 16066 S 16067 22 CHF

I.630 Amendment 1 (03/00)

4pp E 19457 F 19458 S 19459 9 CHF

I.630 Corrigendum 1 (03/00)

#### **B-ISDN** equipment aspects

#### ATM equipment

**I.731 (10/00)** Types and general characteristics of ATM equipment

36pp E 20012 F 20013 S 20014 22 CHF

**I.732 (10/00)** Functional characteristics of ATM equipment

254pp E 20090 F 20091 S 20092 96 CHF

#### Transport functions

**I.741 (07/99)** Interworking and interconnection between ATM and switched telephone networks for the transmission of speech, voiceband data and audio signals

44pp E 16470 F 16471 S 16472 22 CHF

### Management of ATM equipment

**I.751 (03/96)** Asynchronous transfer mode management of the network element view

84pp E 7502 F 7503 S 7504 39 CHF

#### Multiplexing aspects

**I.761 (03/00)** Inverse multiplexing for ATM (IMA)

8pp E 19489 F 19490 S 19491 9 CHF

**I.762 (03/00)** ATM over fractional physical links

8pp E 19515 F 19516 S 19517 9 CHF

### SERIES J

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

#### General Recommendations

#### J.1 (09/99) Withdrawn (09/02)

Terms, definitions and acronyms applicable to the transmission of television and sound-programme signals and of related data signals

With the development of the ITU-T terms and definitions database available on the ITU-T web site, Recommendation J.1 and Supplement 4 to J series no longer serve a useful purpose

8pp E 17553 F 17554 S 17555 9 CHF

**J.2 (09/99)** Guidelines on the use of some ITU-T Recommendations in the J series

8pp E 17556 F 17557 S 17558 9 CHF

# General specifications for analogue sound-programme transmission

**J.11 (11/88)** Hypothetical reference circuits for sound-programme transmissions

Formerly ITU-R Rec. CMTT 502-2

Individually through the Electronic Bookshop: 20 CHF

**J.12 (11/88)** Types of sound-programme circuits established over the international telephone network

*Individually through the Electronic Bookshop:* 20 CHF

**J.13 (11/88)** Definitions for international sound-programme circuits

*Individually through the Electronic Bookshop:* 20 CHF

**J.14 (11/88)** Relative levels and impedances on an international sound-programme connection

**J.15 (11/88)** Lining-up and monitoring an international sound-programme connection

*Individually through the Electronic Bookshop:* 20 CHF

**J.16 (11/88)** Measurement of weighted noise in sound-programme circuits

Individually through the Electronic Bookshop: 20 CHF

J.17 (11/88) Pre-emphasis used on sound-programme circuits

Individually through the Electronic Bookshop: 20 CHF

**J.18 (11/88)** Crosstalk in sound-programme circuits set up on carrier systems

Individually through the Electronic Bookshop: 20 CHF

**J.19 (11/88)** A conventional test signal simulating sound-programme signals for measuring interference in other channels

Formerly ITU-R Rec. CMTT 571-2

*Individually through the Electronic Bookshop:* 20 CHF

Performance characteristics of analogue sound-programme circuits

**J.21 (08/94)** Performance characteristics of 15 kHz-type sound-programme circuits – Circuits for high quality monophonic and stereophonic transmissions

Formerly ITU-R Rec. CMTT 505-5

8pp E 5570 F 5569 S 5571 11 CHF

J.22 (10/84) Withdrawn (03/93)

Performance characteristics of 10 kHz type sound-programme circuits

Deleted after its content became technically out of date

**J.23 (11/88)** Performance characteristics of 7 kHz type (narrow bandwidth) sound-programme circuits

Formerly ITU-R Rec. CMTT 503-4

*Individually through the Electronic Bookshop:* 20 CHF

**J.24 (02/82)** Modulation of signals carried by sound-program circuits by interfering signals from power supply sources

Published as ITU-R Rec. CMTT 474-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

Individually through the Electronic Bookshop: 20 CHF

E 11208 F 11208 S 11208 9 CHF

**J.25 (05/86)** Estimation of transmission performance of sound-programme circuits shorter or longer than the hypothetical reference circuit

Published as ITU-R Rec. CMTT 605-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

Individually through the Electronic Bookshop: 20 CHF

E 11209 F 11209 S 11209 9 CHF

**J.26 (06/90)** Test signals to be used on international sound-programme connections

Published as ITU-R Rec. CMTT 645-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

Individually through the Electronic Bookshop: 20 CHF

E 11210 F 11210 S 11210 9 CHF

**J.27 (06/90)** Signals for the alignment of international sound-programme connections

Published as ITU-R Rec. CMTT 661-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11211 F 11211 S 11211

9 CHF

Equipment and lines used for analogue sound-programme circuits

#### J.31 (11/88) Withdrawn (03/99)

Characteristics of equipment and lines used for setting up 15 kHz type sound-programme circuits

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

#### J.32 (10/84) Withdrawn (03/93)

Characteristics of equipment and lines used for setting up 10 kHz type sound-programme circuits

Deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

#### J.33 (11/88) Withdrawn (03/99)

Characteristics of equipment and lines used for setting up 6.4 kHz type sound-programme circuits

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

#### J.34 (11/88) Withdrawn (03/99)

Characteristics of equipment used for setting up 7 kHz type sound-programme circuits

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

Digital encoders for analogue sound-programme signals

**J.41 (11/88)** Characteristics of equipment for the coding of analogue high quality sound programme signals for transmission on 384 kbit/s channels

Individually through the Electronic Bookshop: 20 CHF

**J.42 (11/88)** Characteristics of equipment for the coding of analogue medium quality sound-programme signals for transmission on 384-kbit/s channels

#### J.43 (11/88) Withdrawn (03/99)

Characteristics of equipment for the coding of analogue high quality sound programme signals for transmission on 320 kbit/s channels

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

# J.44 (11/88) Withdrawn (03/99)

Characteristics of equipment for the coding of analogue medium quality sound-programme signals for transmission on 320 kbit/s channels

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

#### Digital transmission of sound-programme signals

**J.51 (08/94)** General principles and user requirements for the digital transmission of high quality sound programmes

Formerly ITU-R Rec. CMTT 659-1

3pp E 5573 F 5572 S 5574 8 CHF

**J.52 (07/96)** 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)

32pp E 9827 F 9828 S 9829 17 CHF

**J.52 Amendment 1 (09/99)** New Appendix II – Extracts from EBU specification of an ISDN Codec capable of delivering high-quality audio

12pp E 17959 F 17960 S 17961 9 CHF

**J.53 (05/00)** Sampling frequency to be used for the digital transmission of high-quality sound-programme signals

8pp E 19776 F 19777 S 19778 9 CHF

**J.54 (05/86)** Transmission of analogue high-quality sound-programme signals on mixed analogue-and-digital circuits using 384 kbit/s channels

Published as ITU-R Rec. CMTT 660 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11220 F 11220 S 11220 9 CHF

**J.55** (06/90) Digital transmission of high-quality sound-programme signals on distribution circuits using 480 kbit/s (496 kbit/s) per audio channel

Published as ITU-R Rec. CMTT 718 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11221 F 11221 S 11221 12 CHF

#### J.56 (06/90) Withdrawn (03/99)

Transmission of high-quality sound-programme analogue signals over mixed analogue/digital circuits at 320 kbit/s

Was published as ITU-R Rec. CMTT 719 in CCIR Recommendations, Volume XII, Düsseldorf, 1990. Deleted because no system or equipment have implemented it during the last two study periods

**J.57 (06/90)** Transmission of digital studio quality sound signals over H1 channels

Published as ITU-R Rec. CMTT 724 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

Individually through the Electronic Bookshop: 20 CHF

1pp E 11236 F 11236 S 11236 12 CHF

### Circuits for analogue television transmission

**J.61 (06/90)** Transmission performance of television circuits designed for use in international connections

Published as ITU-R Rec. CMTT 567-3 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 13368 F 13368 S 13368 22 CHF

**J.62 (02/78)** Single value of the signal-to-noise ratio for all television systems

Published as ITU-R Rec. CMTT 568 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11237 F 11237 S 11237 9 CHF

**J.63 (06/90)** Insertion of test signals in the field-blanking interval of monochrome and colour television signals

Published as ITU-R Rec. CMTT 473-5 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 10596 F 10596 S 10596 12 CHF

**J.64 (02/86)** Definitions of parameters for simplified automatic measurement of television insertion test signals

Published as ITU-R Rec. CMTT 569-2 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11238 F 11238 S 11238 12 CHF

**J.65 (02/78)** Standard test signal for conventional loading of a television channel

Published as ITU-R Rec. CMTT 570 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11239 F 11239 S 11239 9 CHF

**J.66 (02/78)** Transmission of one sound programme associated with analogue television signal by means of time division multiplex in the line synchronizing pulse

Published as ITU-R Rec. CMTT 572 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11240 F 11240 S 11240

9 CHF

**J.67 (03/01)** Test signals and measurement techniques for transmission circuits carrying MAC/packet signals

30pp E 20609 F 20610 S 20611 17 CHF

**J.68 (02/82)** Hypothetical reference chain for television transmissions over very long distances

Published as ITU-R Rec. CMTT 603 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11241 F 11241 S 11241 9 CHF

Analogue television transmission over metallic lines and interconnection with radio-relay links

# J.73 (11/88) Withdrawn (03/99)

Use of a 12-MHz system for the simultaneous transmission of telephony and television

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

# J.74 (11/88) Withdrawn (03/99)

Methods for measuring the transmission characteristics of translating equipments

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

# J.75 (11/88) Withdrawn (03/99)

Interconnection of systems for television transmission on coaxial pairs and on radio-relay links

Deleted because no system or equipment have implemented it during the last two study periods

Individually through the Electronic Bookshop: 20 CHF

### J.77 (11/88) Withdrawn (03/99)

Characteristics of the television signals transmitted over 18 MHz and 60-MHz systems

Deleted because no system or equipment have implemented it during the last two study periods

*Individually through the Electronic Bookshop:* 20 CHF

#### Digital transmission of television signals

**J.80 (09/93)** Transmission of component-coded digital television signals for contribution-quality applications at bit rates near 140 Mbit/s

Formerly ITU-R Rec. CMTT 721-2

15pp E 5576 F 5575 S 5577 15 CHF

**J.81 (09/93)** Transmission of component-coded digital television signals for contribution-quality applications at the third hierarchical level of ITU-T Recommendation G.702

Formerly ITU-R Rec. CMTT.723-1

66pp E 5579 F 5578 S 5580 30 CHF

**J.81 Amendment 1 (10/95)** Appendix II to Annex A to Recommendation J.81 – Guidelines for implementation of a complete television codec

4pp E 6441 F 6442 S 6443 8 CHF

**J.81 Amendment 2 (03/98)** Appendix IV to Annex A – Results of 34 Mbit/s codec interworking tests (February 1996)

8pp E 13519 F 13520 S 13521 9 CHF

# J.81 Corrigendum 1 (10/96)

**J.82 (07/96)** Transport of MPEG-2 constant bit rate television signals in B-ISDN

8pp E 7403 F 7404 S 7405 9 CHF

**J.83 (04/97)** Digital multi-programme systems for television, sound and data services for cable distribution

Covering note, 3.08.1998: Corrigendum

64pp E 11880 F 11881 S 11882 29 CHF

#### J.83 Corrigendum 1 (09/96)

**J.84 (03/01)** Distribution of digital multi-programme signals for television, sound and data services through SMATV networks

34pp E 20593 F 20594 S 20595 17 CHF

**J.85 (06/90)** Digital television transmission over long distances – General principles

Published as ITU-R Rec. CMTT 604-2 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11246 F 11246 S 11246 9 CHF

**J.86 (06/90)** Mixed analogue-and-digital transmission of analogue composite television signals over long distances

Published as ITU-R Rec. CMTT 658-1 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

*Individually through the Electronic Bookshop:* 20 CHF

E 11247 F 11247 S 11247

limba Can

9 CHF

**J.87 (03/01)** Use of hybrid cable television links for the secondary distribution of television into the user's premises

18pp E 20425 F 20426 S 20427 12 CHF

**J.88 (09/99)** Transmission of enhanced definition television signals over digital links

56pp E 18058 F 18059 S 18060 29 CHF

**J.89 (09/99)** 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

20pp E 17697 F 17698 S 17699 17 CHF

Ancillary digital services for television transmission

**J.90 (05/00)** Electronic programme guides for delivery by digital cable television and similar methods

12pp E 19695 F 19696 S 19697 12 CHF

**J.91 (08/94)** Technical methods for ensuring privacy in long-distance international television transmission

17pp E 5582 F 5581 S 5583 15 CHF

J.92 (04/97) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

8pp E 11173 F 11174 S 11175 9 CHF

**J.93 (03/98)** Requirements for conditional access in the secondary distribution of digital television on cable television systems

12pp E 13494 F 13495 S 13496 12 CHF

**J.94 (11/98)** Service information for digital broadcasting in cable television systems

84pp E 16336 F 16337 S 16339 96 CHF

**J.94 Amendment 2 (03/01)** Additions to Annex C – Service information for digital multi-programme System C

14pp E 20428 F 20429 S 20430 12 CHF

**J.94 Amendment 1 (10/00)** Service information delivered out of band for digital cable television systems

128pp E 20330 F 20331 S 20332 49 CHF

**J.95 (09/99)** Copy protection of intellectual property for content delivered on cable television systems

60pp E 18570 F 18571 S 18572 29 CHF

**J.96 (07/02)** Technical method for ensuring privacy in long-distance international MPEG-2 television transmission conforming to Recommendation J.89

18pp E 22313 F 22314 S 22315 12 CHF

**J.97 (07/02)** Metadata on cable networks

9pp E 22665 F 22666 S 22667 9 CHF

Operational requirements and methods for television transmission

**J.100 (06/90)** Tolerances for transmission time differences between the vision and sound components of a television signal

Published as ITU-R Rec. CMTT 717 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

Individually through the Electronic Bookshop: 20 CHF

E 11248 F 11248 S 11248

9 CHF

**J.101 (06/90)** Measurement methods and test procedures for teletext signals

Published as ITU-R Rec. CMTT 720 in CCIR Recommendations, Volume XII, Düsseldorf, 1990

Individually through the Electronic Bookshop: 20 CHF

E 11249 F 11249 S 11249 9 CHF

Interactive systems for digital television distribution

**J.110 (04/97)** Basic principles for a worldwide common family of systems for the provision of interactive television services

12pp E 10742 F 10744 S 10743 12 CHF

**J.111 (03/98)** Network independent protocols for interactive systems

Guidelines for the implementation of Rec. J.111 may be found in Supplement 3 to J series (1998).

16pp E 13568 F 13569 S 13570 12 CHF

**J.112 (03/98)** Transmission systems for interactive cable television services

Example of linking options between annexes of Rec. J.112 and annexes of Rec. J.83 may be found in Supplement 1 to J series (1998). Guidelines for the implementation of annex A of Rec. J.112 may be found in Supplement 2 to J series (1998).

256pp E 14338 F 14339 S 14340 96 CHF

**J.112 Amd1 (03/01)** New Annexes A and B To be published...

**J.112 Annex A (03/01)** Digital video broadcasting: DVB interaction channel for cable TV distribution systems

192pp E 21982 F 21983 S 21984 73 CHF

**J.112 Annex B (03/01)** Data-over-cable service interface specifications: Radio frequency interface specification

488pp E 22392 F 22393 S 22394 197 CHF

**J.112** Annex B Amendment 1 (02/02)

1pp E 22386 F 22387 S 22388 9 CHF

J.112 Annex C (02/02) Data-over-cable service interface specifications: Radio-frequency interface specification using QAM technique Available as a prepublished version To be published...

**J.113 (03/98)** Digital video broadcasting interaction channel through the PSTN/ISDN

8pp E 13497 F 13498 S 13499 9 CHF

**J.114 (09/99)** Interaction channel using digital enhanced cordless telecommunications

20pp E 18010 F 18011 S 18012 17 CHF

**J.115 (09/99)** Interaction channel using the global system for mobile communications

12pp E 17708 F 17709 S 17710 12 CHF

**J.116 (05/00)** Interaction channel for local multipoint distribution systems

240pp E 20333 F 20334 S 20335 96 CHF

**J.117 (09/99)** Home digital network interface specification

100pp E 17995 F 17996 S 17997 44 CHF

J.118 (05/00) Access systems for interactive services on SMATV/MATV networks

38pp E 19977 F 19978 S 19979 22 CHF

**J.120 (05/00)** Recommendation J.120 (05/00) – Distribution of sound and television programs over the IP network

24pp E 20002 F 20003 S 20004 67 CHF

**J.121 (02/02)** Quality control protocol for webcasting 26pp E 22172 F 22173 S 22174 17 CHF

**J.122 (12/02)** Second generation transmission systems for interactive cable television services – IP cable modems

To be published...

**J.123 (07/02)** Multiplexing format for webcasting on TCP/IP network

21pp E 22900 F 22901 S 22902 17 CHF

Transport of MPEG-2 signals on packetised networks

**J.131 (03/98)** Transport of MPEG-2 signals in PDH networks

28pp E 13668 F 13669 S 13670 17 CHF

**J.132 (03/98)** Transport of MPEG-2 signals in SDH networks

36pp E 13763 F 13764 S 13765 22 CHF

**J.133 (07/02)** Measurement of MPEG-2 transport streams in networks

28pp E 22742 F 22743 S 22744 17 CHF

Measurement of the quality of service

**J.140 (03/98)** Subjective picture quality assessment for digital cable television systems

12pp E 13571 F 13572 S 13573 12 CHF

**J.141 (09/99)** Performance indicators for data services delivered over digital cable television systems

8pp E 17660 F 17661 S 17662 9 CHF

**J.142 (05/00)** Methods for the measurement of parameters in the transmission of digital cable television signals

50pp E 20034 F 20035 S 20036 22 CHF

**J.143 (05/00)** User requirements for objective perceptual video quality measurements in digital cable television

12pp E 19724 F 19725 S 19726 12 CHF

**J.144 (03/01)** Objective perceptual video quality measurement techniques for digital cable television in the presence of a full reference

88pp E 21606 F 21607 S 21608 34 CHF

**J.145 (03/01)** Measurement and control of the quality of service for sound transmission over contribution and distribution networks

12pp E 20770 F 20771 S 20772 9 CHF

Measurement of the quality of service

**J.146 (07/02)** Loop latency issues in contribution circuits for conversational TV programmes

14pp E 22729 F 22730 S 22731 12 CHF

**J.147 (07/02)** Objective picture quality measurement method by use of in-service test signals

18pp E 22779 F 22780 S 22781 12 CHF

Digital television distribution through local subscriber networks

**J.150 (03/98)** Operational functionalities for the delivery of digital multiprogramme television, sound and data services through multichannel, multipoint distribution systems (MMDS)

16pp E 13706 F 13707 S 13708 12 CHF

**J.150 Amendment 1 (09/99)** Additions to Recommendation J.150 to also encompass local multipoint distribution systems (LMDS)

12pp E 17678 F 17679 S 17680 12 CHF

72

**J.150 Amendment 2 (03/01)** Operational functionalities for the delivery of digital multiprogramme television, sound and data services through multichannel, multipoint distribution systems (MMDS)

10pp E 20989 F 20990 S 20991 9 CHF

**J.151 (10/00)** RF remodulator interface for digital television

32pp E 19964 F 19965 S 19966 17 CHF

#### **IPCablecom**

**J.160 (02/02)** Architectural framework for the delivery of time-critical services over cable television networks using cable modems

52pp E 21842 F 21843 S 21844 22 CHF

Digital television distribution through local subscriber networks

**J.161 (03/01)** Audio codec requirements for the provision of bidirectional audio service over cable television networks using cable modems

16pp E 20557 F 20558 S 20559 12 CHF

**J.162 (03/01)** Network call signalling protocol for the delivery of time critical services over cable television networks using cable modems

116pp E 21830 F 21831 S 21832 44 CHF

#### *IPCablecom*

#### J.162 Amendment 1 (02/02)

44pp E 22881 F 22882 S 22883 22 CHF

Digital television distribution through local subscriber networks

**J.163 (03/01)** Dynamic quality of service for the provision of real time services over cable television networks using cable modems

232pp E 21014 F 21015 S 21016 96 CHF

**J.164 (03/01)** Event message requirements for the support of real-time services over cable television networks using cable modems

63pp E 20740 F 20741 S 20742 29 CHF

#### *IPCablecom*

**J.165 (02/02)** IPCablecom signalling transport protocol

60pp E 22461 F 22462 S 22463 29 CHF

## Digital television distribution through local subscriber networks

**J.166 (03/01)** IPCablecom management information base (MIB) framework

20pp E 21244 F 21245 S 21246 12 CHF

**J.167 (03/01)** Media Terminal Adapter (MTA) device provisioning requirements for the delivery of real time services over cable television networks using cable modems

42pp E 21336 F 21337 S 21338 22 CHF

**J.168 (03/01)** IPCablecom media terminal adapter (MTA) MIB requirements

26pp E 21291 F 21292 S 21293 17 CHF

**J.169 (03/01)** IPCablecom network call signalling (NCS) MIB requirements

24pp E 21216 F 21217 S 21218 17 CHF

#### *IPCablecom*

**J.170 (02/02)** IPCablecom security specification To be published...

**J.171 (02/02)** IPCablecom Trunking Gateway Control Protocol (TGCP)

96pp E 22111 F 22112 S 22113 39 CHF

J.172 (02/02) IPCablecom management event mechanism

16pp E 22656 F 22657 S 22658 12 CHF

**J.173 (02/02)** IPCablecom embedded MTA primary line support

29pp E 22652 F 22653 S 22654 17 CHF

**J.174 (02/02)** IPCablecom interdomain quality of service

29pp E 22685 F 22686 S 22687 17 CHF

J.175 (07/02) Audio server protocol

58pp E 22929 F 22930 S 22931 29 CHF

**J.176 (07/02)** IPCablecom management event mechanism MIB

22pp E 22754 F 22755 S 22756 17 CHF

## Digital television distribution through local subscriber networks

**J.180 (05/00)** User requirements for statistical multiplexing of several programmes on a transmission channel

8pp E 19860 F 19861 S 19862 9 CHF

J.181 (03/01) Digital program insertion cueing message for cable television systems

E 20918 F 20919 S 20920 17 CHF 27pp

J.182 (03/01) Parameter sets for analogue interface specifications for the interconnection of set-top-boxes and presentation devices in the home

50pp E 20524 F 20525 S 20526 22 CHF

**J.183 (03/01)** Time division multiplexing of multiple MPEG-2 transport streams over cable television systems

E 20560 F 20561 S 20562 12 CHF 16pp

**J.184 (03/01)** Digital broadband delivery system: Out-of-band transport

108pp E 21609 F 21610 S 21611 44 CHF

#### *Miscellaneous*

J.185 (02/02) Transmission equipment for transferring multi-channel television signals over optical access networks by FM conversion

E 22757 F 22758 S 22759 20pp 12 CHF

**J.186 (02/02)** Transmission equipment for multi-channel television signals over optical access networks by sub-carrier multiplexing (SCM)

23pp E 22680 F 22681 S 22682 17 CHF

#### Miscellaneous

J.187 (07/02) Transport mechanism for component-coded digital high-definition television signals using MPEG-2 video coding including all service elements for contribution and primary distribution

12 CHF E 22782 F 22783 S 22784 14pp

**J.188 (07/02)** A framework for an efficient parallel video transmission system including codecs with functions of failure detection and picture quality evaluation

18pp E 22849 F 22850 S 22851 12 CHF

J.189 (07/02) Seamless splicing for MPEG-2 bit streams

16pp E 22785 F 22786 S 22787 12 CHF

J.190 (07/02) Architecture of MediaHomeNet that supports cable based services

E 22986 F 22987 S 22988 22 CHF 52pp

**J.191 (07/02)** IP Feature Package to enhance cable modems

To be published...

Digital television distribution through local subscriber networks

J.200 (03/01) Worldwide common core – Application environment for digital interactive television services

E 20736 F 20737 17 CHF S 20738 28pp

#### **Supplements to the Series J Recommendations**

Suppl. 1 (11/98) Example of linking options between annexes of ITU-T Recommendation J.112 and annexes of ITU-T Recommendation J.83

E 15602 F 15603 S 15604 12 CHF 8pp

**Suppl. 2 (11/98)** 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

E 15645 F 15646 S 15647 17 CHF 28pp

**Suppl. 3 (11/98)** Guidelines for the implementation of Recommendation J.111 "Network independent protocols" – Example of Digital Video Broadcasting (DVB) systems for interactive services

E 15748 F 15749 S 15750 17 CHF 28pp

**Suppl. 5 (09/99)** Guidelines on the use of some ITU-T Recommendations in the J series

20pp E 18387 F 18387 S 18387 17 CHF

#### SERIES K

### Protection against interference

#### Withdrawn (10/96) K.1 (11/88)

Connection to earth of an audio-frequency telephone line in cable

Deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

#### K.2 (11/88) Withdrawn (10/96)

Protection of repeater power-feeding systems against interference from neighbouring electricity lines

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### K.3 (11/88) Withdrawn (10/96)

Interference caused by audio-frequency signals injected into a power distribution network

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

#### K.4 (11/88) Withdrawn (10/96)

Disturbance to signalling

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

**K.5** (11/88) Joint use of poles for electricity distribution and for telecommunications

Individually through the Electronic Bookshop: 20 CHF

**K.6 (11/88)** Precautions at crossings

Individually through the Electronic Bookshop: 20 CHF

K.7 (11/88) Protection against acoustic shock

*Individually through the Electronic Bookshop:* 20 CHF

**K.8 (11/88)** Separation in the soil between telecommunication cables and earthing system of power facilities

*Individually through the Electronic Bookshop:* 20 CHF

**K.9** (11/88) Protection of telecommunication staff and plant against a large earth potential due to a neighbouring electric traction line

Individually through the Electronic Bookshop: 20 CHF

**K.10 (10/96)** Low frequency interference due to unbalance about earth of telecommunication equipment

16pp E 10694 F 10695 S 10696 12 CHF

**K.11 (10/93)** Principles of protection against overvoltages and overcurrents

11pp E 4695 F 4694 S 4696 11 CHF

**K.12 (02/00)** Characteristics of gas discharge tubes for the protection of telecommunications installations

20pp E 18564 F 18565 S 18566 17 CHF

**K.13 (11/88)** Induced voltages in cables with plastic-insulated conductors

*Individually through the Electronic Bookshop:* 20 CHF

**K.14 (11/88)** Provision of a metallic screen in plastic-sheathed cables

*Individually through the Electronic Bookshop:* 20 CHF

**K.15 (11/88)** Protection of remote-feeding systems and line repeaters against lightning and interference from neighbouring electricity lines

*Individually through the Electronic Bookshop:* 20 CHF

#### K.16 (11/88) Withdrawn (09/01)

Simplified calculation method for estimating the effect of magnetic induction from power lines on remote-fed repeaters in coaxial pair telecommunication systems

Rec. K.16 was withdrawn because it deals only with calculation methods contained in the "Directives – Volume II: Calculating induced voltages and currents in practical cases' without giving any limit

*Individually through the Electronic Bookshop:* 20 CHF

**K.17 (11/88)** Tests on power-fed repeaters using solid-state devices in order to check the arrangements for protection from external interference

*Individually through the Electronic Bookshop:* 20 CHF

**K.18 (11/88)** Calculation of voltage induced into telecommunication lines from radio station broadcasts and methods of reducing interference

*Individually through the Electronic Bookshop:* 20 CHF

**K.19 (11/88)** Joint use of trenches and tunnels for telecommunication and power cables

*Individually through the Electronic Bookshop:* 20 CHF

**K.20 (02/00)** Resistibility of telecommunication equipment installed in a telecommunications centre to overvoltages and overcurrents

20pp E 18549 F 18550 S 18551 17 CHF

**K.21 (10/00)** Resistibility of telecommunication equipment installed in costumer's premises to overvoltages and overcurrents

24pp E 19854 F 19855 S 19856 17 CHF

**K.22 (05/95)** Overvoltage resistibility of equipment connected to an ISDN T/S bus

8pp E 6350 F 6351 S 6352 8 CHF

**K.23 (11/88)** Types of induced noise and description of noise voltage parameters for ISDN basic user networks

*Individually through the Electronic Bookshop:* 20 CHF

**K.24 (11/88)** Method for measuring radio-frequency induced noise on telecommunications pairs

*Individually through the Electronic Bookshop:* 20 CHF

**K.25 (02/00)** Protection of optical fibre cables

24pp E 18294 F 18295 S 18296 17 CHF

**K.26 (11/88)** Protection of telecommunication lines against harmful effects from electric power and electrified railway lines

*Individually through the Electronic Bookshop:* 20 CHF

**K.27 (05/96)** Bonding configurations and earthing **K.38 (10/96)** Radiated emission test procedure for inside a telecommunication building physically large systems E 10583 12pp F 10584 S 10585 12 CHF E 7329 F 7330 S 7331 17 CHF 24pp **K.39 (10/96)** Risk assessment of damages to K.28 (03/93) Characteristics of semi-conductor telecommunication sites due to lightning discharges arrester assemblies for the protection of E 10697 F 10698 S 10699 12 CHF 16pp telecommunications installations **K.40 (10/96)** Protection against LEMP in E 4590 F 4589 S 4591 11 CHF 11pp telecommunications centres K.29 (01/92) Coordinated protection schemes for E 10758 F 10759 S 10760 12 CHF 16pp telecommunication cables below ground **K.41 (05/98)** Resistibility of internal interfaces of E 2606 F 2636 S 2667 8 CHF 4pp telecommunication centres to surge overvoltages E 13574 F 13575 S 13576 12pp 12 CHF **K.30 (03/93)** Positive temperature coefficient (PTc) thermistors **K.42 (05/98)** Analytical method to calculate visibility statistics for non-geostationary satellite orbit E 4653 F 4652 S 4654 11 CHF 7pp satellites as seen from a point on the Earth's surface E 13577 F 13578 S 13579 12pp 12 CHF **K.31 (03/93)** Bonding configurations and earthing of telecommunication installations inside a subscriber's **K.43 (05/98)** Resistibility of telecommunication building equipment installed in costumer's premises to 7pp E 4698 F 4697 S 4699 11 CHF overvoltages and overcurrents E 13693 F 13694 20pp S 13695 17 CHF K.32 (05/95) Withdrawn (06/00) Immunity requirements and test methods for K.43 Corrigendum 1 (02/00) electrostatic discharge to telecommunication equipment - Generic EMC Recommendation **K.44 (02/00)** Resistibility of telecommunication equipment to overvoltages and overcurrents The content of this Recommendation has been superseded 72pp E 18834 F 18835 S 18836 34 CHF by ITU-T K.43 (1998) and K.48 (2000) S 6349 E 6347 F 6348 8 CHF 8pp **K.45 (02/00)** Resistibility of access network equipment to overvoltages and overcurrents **K.33 (10/96)** Limits for people safety related to E 18448 F 18449 S 18450 12 CHF 20pp coupling into telecommunications system from a.c. electric power and a.c. electrified railway **K.46 (12/00)** Protection of telecommunication lines installations in fault conditions using metallic symmetric conductors against lightning induced surges E 10103 F 10104 S 10105 12 CHF 16pp E 21495 F 21496 S 21497 20pp 17 CHF K.34 (02/00) Classification of electromagnetic **K.47 (12/00)** Protection of telecommunication lines environmental conditions for telecommunication using metallic conductors against direct lightning equipment - Basic EMC Recommendation discharges E 18303 F 18304 S 18305 17 CHF 20pp E 21498 F 21499 S 21500 12 CHF 16pp K.48 (02/00) EMC requirements for each K.35 (05/96) Bonding configurations and earthing at telecommunication network equipment - Product remote electronic sites family Recommendation S 7334 12 CHF 12pp E 7332 F 7333 E 18414 F 18415 S 18416 17 CHF 24pp **K.36 (05/96)** Selection of protective devices **K.49 (02/00)** Test condition and performance criteria for voice terminal subject to disturbance from digital 12pp E 7365 F 7366 S 7367 12 CHF mobile phone 16pp E 18306 F 18307 S 18308 12 CHF **K.37 (02/99)** Low and high frequency EMC mitigation techniques for telecommunication K.50 (02/00) Safe limits of operating voltages and installations and systems - Basic EMC currents for telecommunication systems powered Recommendation over the network

F 15509

S 15510

17 CHF

16pp

E 18297 F 18298 S 18299

12 CHF

E 15508

20pp

K.51 (02/00) Safety criteria for telecommunication equipment

8pp E 18300 F 18301 S 18302 9 CHF

**K.52 (02/00)** Guidance on complying with limits for human exposure to electromagnetic fields

44pp E 18690 F 18691 S 18692 22 CHF

**K.53 (02/00)** Values of induced voltages on telecommunication installations to establish telecom and a.c. power and railway operators responsibilities

8pp E 18451 F 18452 S 18453 9 CHF

**K.54 (10/00)** Conducted immunity test method and level at fundamental power frequencies

9pp E 19810 F 19811 S 19812 9 CHF

K.54 Erratum (08/02)

**K.55** (08/02) Overvoltage and overcurrent requirements for insulation displacement connectors (IDC) terminations

20pp E 22745 F 22746 S 22747 12 CHF

#### SERIES L

Construction, installation and protection of cables and other elements of outside plant

**L.1 (11/88)** Construction, installation and protection of telecommunication cables in public networks

*Individually through the Electronic Bookshop:* 20 CHF

L.2 (11/88) Impregnation of wooden poles

*Individually through the Electronic Bookshop:* 20 CHF

L.3 (11/88) Armouring of cables

*Individually through the Electronic Bookshop:* 20 CHF

L.4 (11/88) Aluminium cable sheaths

Individually through the Electronic Bookshop: 20 CHF

L.5 (11/88) Cable sheaths made of metals other than lead or aluminium

*Individually through the Electronic Bookshop:* 20 CHF

**L.6 (11/88)** Methods of keeping cables under gas pressure

*Individually through the Electronic Bookshop:* 20 CHF

L.7 (11/88) Application of joint cathodic protection

Individually through the Electronic Bookshop: 20 CHF

L.8 (11/88) Corrosion caused by alternating current

Individually through the Electronic Bookshop: 20 CHF

**L.9** (11/88) Methods of terminating metallic cable conductors

*Individually through the Electronic Bookshop:* 20 CHF

**L.10 (12/02)** Optical fibre cables for duct and tunnel application

To be published...

**L.11 (11/88)** Joint use of tunnels by pipelines and telecommunication cables, and the standardization of underground duct plans

*Individually through the Electronic Bookshop:* 20 CHF

L.12 (05/00) Optical fibre joints

28pp E 19816 F 19817 S 19818 17 CHF

**L.13 (07/92)** Sheath joints and organizers of optical fibre cables in the outside plant

4pp E 2823 F 2788 S 2858 8 CHF

**L.14 (07/92)** Measurement method to determine the tensile performance of optical fibre cables under load

5pp E 2835 F 2800 S 2833 8 CHF

**L.15 (03/93)** Optical local distribution networks – Factors to be considered for their construction

8pp E 5011 F 5010 S 5012 8 CHF

**L.16 (03/93)** Conductive plastic material (CPM) as protective covering for metal cable sheaths

2pp E 4281 F 4280 S 4282 8 CHF

**L.17 (06/95)** Implementation of connecting customers into the public switched telephone network (PSTN) via optical fibres

4pp E 6172 F 6171 S 6173 8 CHF

**L.17 Appendix I (02/97)** Examples of possible applications

8pp E 12553 F 12554 S 12555 9 CHF

**L.18 (10/96)** Sheath closures for terrestrial copper telecommunication cables

8pp E 10642 F 10643 S 10644 9 CHF

**L.19 (10/00)** Copper networks for new services and systems ISDN, HDSL, ADSL and UADSL

16pp E 19869 F 19870 S 19871 12 CHF

L.20 (10/96) Creation of a fire security code for telecommunication facilities E 10645 F 10646 S 10647 9 CHF **L.21 (10/96)** Fire detection and alarm systems, detector and sounder devices E 10648 F 10649 S 10650 12pp 12 CHF **L.22 (10/96)** Fire protection E 10685 F 10686 S 10687 12pp 12 CHF L.23 (10/96) Fire extinction – Classification and location of fire extinguishing installations and equipment on premises 12pp E 10675 F 10676 S 10677 12 CHF L.24 (10/96) Classification of outside plant waste E 10804 F 10805 S 10806 24pp 17 CHF L.25 (10/96) Optical fibre cable network maintenance E 10830 F 10831 S 10832 12 CHF 12pp L.26 (12/02) Optical fibre cables for aerial application To be published... L.27 (10/96) Method for estimating the concentration of hydrogen in optical fibre cables E 10885 F 10886 S 10887 12 CHF 16pp L.28 (10/02) External additional protection for marinized terrestrial cables To be published... L.29 (01/02) As-laid report and maintenance/repair log for marinized terrestrial cable installation E 22004 F 22005 S 22006 9 CHF 12pp L.30 (10/96) Markers on marinized terrestrial cables E 10854 F 10855 S 10856 9 CHF 12pp L.31 (10/96) Optical fibre attenuators E 10857 F 10858 S 10859 9 CHF 8pp L.32 (10/98) Protection devices for through-cable penetrations of fire-sector partitions E 14412 F 14413 S 14414 12 CHF 12pp

L.36 (10/98) Single mode fibre optic connectors E 14283 F 14284 S 14285 12pp 12 CHF **L.37 (10/98)** Fibre optic (non-wavelength selective) branching devices 12pp E 14286 F 14287 S 14288 12 CHF L.38 (09/99) Use of trenchless techniques for the construction of underground infrastructures for telecommunication cable installation E 16636 F 16637 40pp S 16638 22 CHF L.39 (05/00) Investigation of the soil before using trenchless techniques E 19624 F 19625 S 19626 17 CHF 20pp L.40 (10/00) Optical fibre outside plant maintenance support, monitoring and testing system E 20339 F 20340 S 20341 22 CHF L.41 (05/00) Maintenance wavelength on fibres carrying signals E 19433 F 19434 S 19435 12pp 12 CHF L.43 (12/02) Optical fibre cables for buried application To be published... L.44 (10/00) Electric power supply for equipment installed as outside plant E 19961 F 19962 S 19963 37pp 22 CHF **L.45 (10/00)** Minimizing the effect on the environment from the outside plant in telecommunication networks E 19912 F 19913 16pp S 19914 12 CHF L.46 (10/00) Protection of telecommunication cables and plant from biological attack E 19863 F 19864 S 19865 17 CHF 28pp L.47 (10/00) Access facilities using hybrid

#### SERIES M

44pp

fibre/copper networks

E 20006

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

F 20007

S 20008

17 CHF

*Introduction and general principles of* maintenance and maintenance organization

M.10 (10/92) Scope and application of Recommendations for maintenance of telecommunication networks and services 10pp E 3519 F 3518 S 3520 11 CHF

E 14270 F 14271

L.33 (10/98) Periodic control of fire extinction

L.34 (10/98) Installation of Optical Fibre Ground

E 14211 F 14212 S 14213

L.35 (10/98) Installation of optical fibre cables in the

S 14411

S 14272

9 CHF

9 CHF

9 CHF

devices in telecommunication buildings E 14409 F 14410

8pp

8pp

78

Wire (OPGW) cable

access network

systems Individually through the Electronic Bookshop: 20 CHF *Individually through the Electronic Bookshop:* 20 CHF M.160 (11/88) Stability of transmission M.20 (10/92) Maintenance philosophy for telecommunication networks Individually through the Electronic Bookshop: 20 CHF E 3375 F 3374 S 3376 15 CHF 21pp International transmission systems M.21 (10/92) Maintenance philosophy for telecommunication services M.320 (11/88) Numbering of the channels in a group E 3378 F 3377 S 3379 8 CHF Individually through the Electronic Bookshop: 20 CHF M.32 (11/88) Principles for using alarm information for maintenance of international transmission M.330 (11/88) Numbering of groups within a systems and equipment supergroup Individually through the Electronic Bookshop: 20 CHF *Individually through the Electronic Bookshop:* 20 CHF M.34 (11/88) Performance monitoring on M.340 (11/88) Numbering of supergroups within a international transmission systems and equipment mastergroup *Individually through the Electronic Bookshop:* 20 CHF Individually through the Electronic Bookshop: 20 CHF M.35 (11/88) Principles concerning line-up and maintenance limits M.350 (11/88) Numbering of mastergroups within a 20 CHF Individually through the Electronic Bookshop: supermastergroup *Individually through the Electronic Bookshop:* 20 CHF M.50 (11/88) Use of telecommunication terms for maintenance M.380 (11/88) Numbering in coaxial systems For their dealings with their colleagues in other countries, personnel at operation centres and other maintenance Individually through the Electronic Bookshop: 20 CHF units should refer to Fascicle I.3, 'Terms and Definitions', of Volume I of the Blue Book. For maintenance technology, M.390 (11/88) Numbering in systems on symmetric the definitions given in Recommendation M.60 are pair cable preferred. Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF M.60 (03/93) Maintenance terminology and M.400 (11/88) Numbering in radio-relay links or definitions open-wire line systems 64pp E 4395 F 4394 S 4396 24 CHF Individually through the Electronic Bookshop: 20 CHF M.70 (11/88) Guiding principles on the general maintenance organization for telephone-type M.410 (11/88) Numbering of digital blocks in international circuits transmission systems Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF M.75 (10/92) Technical service M.450 (11/88) Bringing a new international E 3332 F 3331 S 3333 8 CHF 2pp transmission system into service M.80 (11/88) Control stations Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF M.460 (11/88) Bringing international group, M.85 (10/92) Fault report points supergroup, etc., links into service E 3423 F 3422 S 3424 8 CHF 2pp Individually through the Electronic Bookshop: 20 CHF M.90 (11/88) Sub-control stations M.470 (11/88) Setting up and lining up analogue Individually through the Electronic Bookshop: 20 CHF channels for international telecommunication services M.100 (11/88) Service circuits Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF **M.110 (11/88)** Circuit testing M.475 (11/88) Setting up and lining up mixed Individually through the Electronic Bookshop: 20 CHF analogue/digital channels for international telecommunication services M.120 (11/88) Access points for maintenance Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF

M.15 (11/88) Maintenance considerations for new

M.125 (11/88) Digital loopback mechanisms

**M.495 (11/88)** Transmission restoration and transmission route diversity: Terminology and general principles

*Individually through the Electronic Bookshop:* 20 CHF

**M.496 (11/88)** Functional organization for automatic transmission restoration

*Individually through the Electronic Bookshop:* 20 CHF

**M.500 (11/88)** Routine maintenance measurements to be made on regulated line sections

Individually through the Electronic Bookshop: 20 CHF

**M.510 (11/88)** Readjustment to the nominal value of a regulated line section (on a symmetric pair line, a coaxial line or a radio-relay link)

*Individually through the Electronic Bookshop:* 20 CHF

**M.520 (11/88)** Routine maintenance on international group, supergroup, etc., links

Individually through the Electronic Bookshop: 20 CHF

**M.525 (11/88)** Automatic maintenance procedures for international group, supergroup, etc., links

Individually through the Electronic Bookshop: 20 CHF

**M.530 (11/88)** Readjustment to the nominal value of an international group, supergroup, etc., link

*Individually through the Electronic Bookshop:* 20 CHF

**M.535 (11/88)** Special maintenance procedures for multiple destination, unidirectional (MU) group and supergroup links

*Individually through the Electronic Bookshop:* 20 CHF

**M.540 (11/88)** Routine maintenance of carrier and pilot generating equipment

Individually through the Electronic Bookshop: 20 CHF

**M.556 (11/88)** Setting up and initial testing of digital channels on an international digital path or block

*Individually through the Electronic Bookshop:* 20 CHF

International telephone circuits

**M.560 (11/88)** International telephone circuits – Principles, definitions and relative transmission levels

Individually through the Electronic Bookshop: 20 CHF

**M.562 (11/88)** Types of circuit and circuit section *Individually through the Electronic Bookshop:* 20 CHF

**M.565 (11/88)** Access points for international telephone circuits

*Individually through the Electronic Bookshop:* 20 CHF

**M.570 (11/88)** Constitution of the circuit; preliminary exchange of information

*Individually through the Electronic Bookshop:* 20 CHF

**M.580 (11/88)** Setting up and lining up an international circuit for public telephony

*Individually through the Electronic Bookshop:* 20 CHF

**M.585 (11/88)** Bringing an international digital circuit into service

Individually through the Electronic Bookshop: 20 CHF

**M.590 (11/88)** Setting up and lining up a circuit fitted with a compandor

*Individually through the Electronic Bookshop:* 20 CHF

**M.600 (11/88)** Organization of routine maintenance measurements on circuits

*Individually through the Electronic Bookshop:* 20 CHF

**M.605 (11/88)** Routine maintenance schedule for international public telephony circuits

Individually through the Electronic Bookshop: 20 CHF

M.610 (11/88) Periodicity of maintenance measurements on circuits

*Individually through the Electronic Bookshop:* 20 CHF

M.620 (11/88) Methods for carrying out routine measurements on circuits

*Individually through the Electronic Bookshop:* 20 CHF

M.630 (11/88) Maintenance of circuits using control chart methods

*Individually through the Electronic Bookshop:* 20 CHF

**M.650 (11/88)** Routine line measurements to be made on the line repeaters of audio-frequency sections or circuits

*Individually through the Electronic Bookshop:* 20 CHF

**M.660 (11/88)** Periodical in-station tests of echo suppressors complying with Recommendations G.161 and G.164

*Individually through the Electronic Bookshop:* 20 CHF

M.665 (11/88) Testing of echo cancellers

Individually through the Electronic Bookshop: 20 CHF

**M.670 (11/88)** Maintenance of a circuit fitted with a compandor

*Individually through the Electronic Bookshop:* 20 CHF

M.675 (11/88) Lining up and maintaining international demand assignment circuits (SPADE)

*Individually through the Electronic Bookshop:* 20 CHF

**M.710 (11/88)** General maintenance organization for the international automatic and semi-automatic telephone service

Individually through the Electronic Bookshop: 20 CHF

M.715 (11/88) Fault report point (circuit)

*Individually through the Electronic Bookshop:* 20 CHF

Individually through the Electronic Bookshop:	20 CHF	
M.717 (11/88) Testing point (transmission)		<b>M.760 (11/88)</b> Transfer link for common channel Signalling System No. 6
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 CH
M.718 (11/88) Testing point (line signalling)  Individually through the Electronic Bookshop:	) 20 CHF	<b>M.762 (11/88)</b> Maintenance of common channel Signalling System No. 6
M.719 (11/88) Testing point (switching and		Individually through the Electronic Bookshop: 20 CH
interregister signalling) Individually through the Electronic Bookshop:	20 CHF	International telegraph systems and phototelegraph transmission
<b>M.720 (11/88)</b> Network analysis point <i>Individually through the Electronic Bookshop:</i>	20 CHF	M.800 (11/88) Use of circuits for voice-frequency telegraphy
M.721 (11/88) System availability information	on point	Individually through the Electronic Bookshop: 20 CH
Individually through the Electronic Bookshop:  M.722 (11/80) Network management point	20 CHF	M.810 (11/88) Setting up and lining up an international voice-frequency telegraph link for
Electronic Bookshop only 20 CHF		public telegraph circuits (for 50, 100 and 200 baud modulation rates)
		Individually through the Electronic Bookshop: 20 CH
M.723 (11/88) Circuit control station  Individually through the Electronic Bookshop:	20 CHF	<b>M.820 (11/88)</b> Periodicity of routine tests on international voice-frequency telegraph links
M.724 (11/88) Circuit sub-control station		Individually through the Electronic Bookshop: 20 CH
Individually through the Electronic Bookshop:	20 CHF	<b>M.830 (11/88)</b> Routine measurements to be made or international voice-frequency telegraph links
M.725 (11/88) Restoration control point <i>Individually through the Electronic Bookshop:</i>	20 CHF	Individually through the Electronic Bookshop: 20 CH
M.726 (11/88) Maintenance organization for wholly digital international automatic and semi-automatic telephone service		M.850 (11/88) International time division multiplex (TDM) telegraph systems  Individually through the Electronic Bookshop: 20 CH
Individually through the Electronic Bookshop:	20 CHF	M.880 (11/88) International phototelegraph
<b>M.729 (11/88)</b> Organization of the maintenar international public switched telephone circu for data transmission		transmission  Individually through the Electronic Bookshop: 20 CH
This Recommendation is also included but not pu V series under alias number V.51	blished in	International leased group and supergroup links
Individually through the Electronic Bookshop:  M.730 (11/88) Maintenance methods	20 CHF	<b>M.900 (11/88)</b> Use of leased group and supergroup links for wide-spectrum signal transmission (data, facsimile, etc.)
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 CH
M.731 (11/88) Subjective testing		M.910 (11/88) Setting up and lining up an
Individually through the Electronic Bookshop:	20 CHF	international leased group link for wide-spectrum signal transmission
<b>M.732 (11/88)</b> Signalling and switching rout maintenance tests and measurements	ine	Individually through the Electronic Bookshop: 20 CH
Individually through the Electronic Bookshop:	20 CHF	International leased circuits
M.733 (11/88) Transmission routine mainter measurements on automatic and semi-autom telephone circuits		<b>M.1010 (11/88)</b> Constitution and nomenclature of international leased circuits
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 CH
M.734 (11/88) Exchange of information on i test facilities at international switching centre		M.1012 (11/88) Circuit control station for leased and special circuits
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 CH

Common channel signalling systems

M.716 (11/88) Fault report point (network)

**M.1013 (11/88)** Sub-control station for leased and special circuits

*Individually through the Electronic Bookshop:* 20 CHF

**M.1014 (11/88)** Transmission maintenance point (international line) (TMP-IL)

*Individually through the Electronic Bookshop:* 20 CHF

**M.1015 (11/88)** Types of transmission on leased circuits

Individually through the Electronic Bookshop: 20 CHF

**M.1016 (11/88)** Assessment of the service availability performance of international leased circuits

Individually through the Electronic Bookshop: 20 CHF

**M.1020 (03/93)** Characteristics of special quality international leased circuits with special bandwidth conditioning

6pp E 5173 F 5228 S 5263 8 CHF

**M.1025 (03/93)** Characteristics of special quality international leased circuits with basic bandwidth conditioning

6pp E 5375 F 5374 S 5376 8 CHF

**M.1030 (11/88)** Characteristics of ordinary quality international leased circuits forming part of private switched telephone networks

*Individually through the Electronic Bookshop:* 20 CHF

**M.1040 (11/88)** Characteristics of ordinary quality international leased circuits

Individually through the Electronic Bookshop: 20 CHF

**M.1045 (05/96)** Preliminary exchange of information for the provision of international leased circuits and international data transmission systems

8pp E 7247 F 7248 S 7249 9 CHF

**M.1050 (06/98)** Lining up an international point-to-point leased circuit with analogue presentation to the user

16pp E 13942 F 13943 S 13944 12 CHF

M.1055 (11/88) Lining up an international multiterminal leased circuit

*Individually through the Electronic Bookshop:* 20 CHF

M.1060 (11/88) Maintenance of international leased circuits

*Individually through the Electronic Bookshop:* 20 CHF

Mobile telecommunication systems and services

**M.1130 (10/92)** General definitions and general principles of operation/maintenance procedures to be used in satellite mobile systems

2pp E 3292 F 3291 S 3293 8 CHF

**M.1140 (10/92)** Maritime mobile telecommunication services via satellite

Replaces M.1100, M.1110, M.1120

12pp E 3426 F 3425 S 3427 11 CHF

M.1150 (04/97) Maintenance aspects of maritime/land mobile telecommunication store-and-forward services (packet mode) via satellite

12pp E 11805 F 11806 S 11807 12 CHF

M.1160 (04/97) Maintenance aspects of aeronautical mobile telecommunication service via satellite

12pp E 11808 F 11809 S 11810 12 CHF

M.1170 (04/97) Maintenance aspects of mobile digital telecommunication service via satellite

12pp E 11732 F 11733 S 11734 12 CHF

International public telephone network

M.1230 (05/96) Method to improve the management of operations and maintenance processes in the International Telephone Network

16pp E 7430 F 7431 S 7432 12 CHF

**M.1235 (11/88)** Use of automatically generated test calls for assessment of network performance

*Individually through the Electronic Bookshop:* 20 CHF

International data transmission systems

**M.1300 (10/97)** Maintenance of international data transmission systems operating in the range 2.4 kbit/s to 140 Mbit/s

16pp E 12397 F 12398 S 12399 12 CHF

M.1301 (01/01) General description and operational procedures for international SDH leased circuits

28pp E 20437 F 20438 S 20439 17 CHF

**M.1320 (11/88)** Numbering of channels in data transmission systems

Individually through the Electronic Bookshop: 20 CHF

M.1340 (02/00) Performance objectives, allocations and limits for international PDH leased circuits and supporting data transmission links and systems

28pp E 18184 F 18186 S 18187 17 CHF

M.1340 Corrigendum 1 (08/01)

**M.1350 (11/88)** Setting up, lining up and characteristics of international data transmission systems operating in the range 2.4 kbit/s to 14.4 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

**M.1355 (11/88)** Maintenance of international data transmission systems operating in the range 2.4 to 14.4 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

**M.1370 (06/98)** Bringing-into-service of international data transmission systems

12pp E 13598 F 13599 S 13600 12 CHF

**M.1375 (06/98)** Maintenance of international data transmission systems

16pp E 13709 F 13710 S 13711 12 CHF

**M.1380 (02/00)** Bringing-into-service of international leased circuits that are supported by international data transmission systems

12pp E 18940 F 18941 S 18942 12 CHF

**M.1385 (02/00)** Maintenance of international leased circuits that are supported by international data transmission systems

12pp E 19123 F 19124 S 19125 12 CHF

Designations and information exchange

**M.1400 (10/01)** Designations for interconnections among operators' networks

136pp E 21764 F 21765 S 21766 55 CHF

**M.1400 Amendment 1 (05/02)** Amendment to the Introduction of Revised Recommendation M.1400

10pp E 22261 F 22262 S 22263 9 CHF

**M.1510 (10/92)** Exchange of contact point information for the maintenance of international services and the international network

10pp E 3480 F 3479 S 3481 11 CHF

**M.1520 (10/92)** Standardized information exchange between Administrations

9pp E 3510 F 3509 S 3511 11 CHF

M.1530 (03/99) Network maintenance information

12pp E 15781 F 15782 S 15783 12 CHF

**M.1532 (02/00)** Network maintenance service performance agreement (MSPA)

24pp E 19379 F 19380 S 19381 17 CHF

**M.1535 (05/96)** Principles for maintenance information to be exchanged at customer contact point (MICC)

12pp E 7369 F 7370 S 7371 12 CHF

**M.1537 (10/97)** Definition of maintenance information to be exchanged at customer contact point (MICC)

20pp E 12382 F 12383 S 12384 17 CHF

M.1539 (03/99) Management of the grade of network maintenance services at the maintenance service customer contact point (MSCC)

44pp E 15955 F 15956 S 15957 22 CHF

**M.1540 (10/94)** Exchange of information for planned outages of transmission systems

4pp E 5915 F 5914 S 5916 8 CHF

M.1550 (10/92) Escalation procedure

3pp E 3395 F 3394 S 3396 8 CHF

**M.1560 (10/92)** Escalation procedure for international leased circuits

11pp E 3489 F 3488 S 3490 11 CHF

International transport network

**M.2100 (07/95)** Performance limits for bringing-into-service and maintenance of international PDH paths, sections and transmission systems

28pp E 6365 F 6366 S 6367 25 CHF

**M.2101 (06/00)** Performance limits and objectives for bringing-into-service and maintenance of international SDH paths and multiplex sections

44pp E 19403 F 19404 S 19405 22 CHF

**M.2101.1 (04/97)** Performance limits for bringing-into-service and maintenance of international SDH paths and multiplex sections

In spite of the fact that ITU-T M.2101.1 and M.2101 are similar, they are both in force. M.2101.1 will eventually be deleted after PDH items have been transferred from M.2101.1 to M.2101.

44pp E 11834 F 11835 S 11836 22 CHF

**M.2102 (02/00)** Maintenance thresholds and procedures for recovery mechanisms (protection and restoration) of international SDH VC trails (paths) and multiplex sections

24pp E 19602 F 19603 S 19604 17 CHF

**M.2110 (07/02)** Bringing-into-service international multi-operator paths, sections and transmission systems

16pp E 22897 F 22898 S 22899 12 CHF

M.2120 (07/02) International multi-operator paths, M.3100 Amendment 3 (01/01) Definition of the sections and transmission systems fault detection and management interface for a generic alarm reporting localization procedures control (ARC) feature E 22732 F 22733 S 22734 12 CHF 18pp E 20587 F 20588 S 20589 44pp M.2130 (02/00) Operational procedures for the M.3100 Amendment 4 (08/01) Definition of the maintenance of the transport network management interface for a bridge-and-roll E 19570 F 19571 S 19572 17 CHF 20pp cross-connect feature M.2140 (02/00) Transport network event correlation E 21815 F 21816 S 21817 24pp 32pp E 19727 F 19728 S 19729 M.3100 Amendment 5 (08/01) Enhanced M.2201 (03/01) Performance objectives, allocations cross-connect model and limits for international ATM permanent and 20pp E 21874 F 21875 S 21876 semi-permanent virtual path and virtual path connection M.3100 Corrigendum 1 (06/98) E 20764 F 20765 S 20766 17 CHF 30pp M.2301 (07/02) Performance objectives and M.3100 Corrigendum 2 (01/01) procedures for provisioning and maintenance of IP-based networks M.3100 Corrigendum 3 (08/01) E 22906 F 22907 S 22908 17 CHF 26pp M.3101 (07/95) Managed object conformance Telecommunications management network statements for the generic network information model M.3000 (02/00) Overview of TMN 100pp E 6297 F 6298 S 6299 Recommendations E 18601 F 18602 S 18603 17 CHF 32pp M.3108 TMN management services for dedicated M.3010 (02/00) Principles for a Telecommunications and reconfigurable circuits network management network E 18328 F 18329 40pp S 18330 17 CHF M.3108.1 (03/99) TMN management services for dedicated and reconfigurable circuits network: M.3013 (02/00) Considerations for a Information model for management of leased circuit telecommunications management network and reconfigurable services 52pp E 18260 F 18261 S 18262 **29 CHF** E 16138 F 16139 S 16140 88pp **M.3016 (06/98)** TMN security overview M.3108.1 Corrigendum 1 (01/01) E 13712 F 13713 S 13714 17 CHF 16pp M.3020 (02/00) TMN Interface Specification Methodology E 19477 F 19478 S 19479 22 CHF **36pp** M.3030 (08/02) Telecommunications Markup

M.3108.2 (02/00) TMN management services for dedicated and reconfigurable circuits network: Information model for connection management of preprovisioned service link connections to form a reconfigurable leased service

E 19114 F 19115 S 19116 22 CHF 48pp

22 CHF

17 CHF

12 CHF

39 CHF

39 CHF

M.3108.3 (01/01) TMN management services for dedicated and reconfigurable circuits network: Information model for management of virtual private network service

E 20488 F 20489 S 20490 12 CHF 20pp

M.3120 (10/01) CORBA generic network and network element level information model

24pp E 22073 F 22074 S 22075 67 CHF

E 19445 F 19446

M.3100 (07/95) Generic network information model

F 6663

F 16130

S 6664

S 16131

S 19447

Enhancement of

15 CHF

34 CHF

17 CHF

Language (tML) Framework

E 6662

E 16129

M.3100 Amendment 2 (02/00)

M.3100 Amendment 1 (03/99)

To be published...

100pp

80pp

M.3100

20pp

M.3120 Amendment 1 (05/02) Protection Switching					Integrated services digital networks				
34pp	E 22414	F 22415	S 22416	17 CHF	<b>M.3600 (1</b> ) ISDNs	<b>0/92)</b> Prin	ciples for the	he managen	nent of
M.3180 (10) information		logue of T	MN manage	ment	20pp	E 3540	F 3539	S 3541	15 CHF
16pp	E 3561	F 3560	S 3562	15 CHF	M.3602 (1	<b>0/92)</b> App	lication of	maintenance	e
M.3200 (04)			nent services reas: overvi		8рр	E 3537	F 3536	S 3538	8 CHF
28pp	E 11704	F 11705	S 11706	17 CHF		<b>0/92)</b> App			e
M.3207.1 (0 maintenan			ement servic I manageme		8pp	E 3474	F 3473	S 3475	8 CHF
12pp	E 7433	F 7434	S 7435	12 CHF		<b>0/92)</b> App			e
M.3208 TM				edicated	17pp	E 3525	F 3524	S 3526	15 CHF
and reconfigurable circuits network  M.3208.1 (10/97) Leased circuit services					<b>0/92)</b> App es to static m				
92pp	E 12556	F 12557	S 12558	39 CHF	5pp	E 3477	F 3476	S 3478	8 CHF
M.3208.1 C	orrigendu	m 1 (02/00	))			5/96) Prine to the manag			TMN
<b>M.3208.2 (03/99)</b> Connection management of pre-provisioned service link connections to form a leased circuit service				16pp	E 7338	F 7339	S 7340	12 CHF	
			form a		<b>4/97)</b> Test yer using the		ent of the B-	ISDN	
40pp	E 15958	F 15959	S 15960	22 CHF	52pp	E 12040	F 12041	S 12042	29 CHF
M.3208.2 Corrigendum 1 (01/01)				,	<b>0/92)</b> Pringstems and re		he use of IS	DN test	
M.3208.3 (0	<b>2/00)</b> Vi	rtual privat	te network			E 3414	•	S 3415	8 CHF
36pp	E 19436	F 19437	S 19438	22 CHF		7/95) Integ	erated man	agement of	the ISDN
M.3210.1 (01/01) TMN management services for IMT-2000 security management			es for	customer	raccess		S 6265	11 CHF	
30pp	E 20392	F 20393	S 20394	17 CHF	7pp	E 6263	F 6264	5 0203	11 CHF
M.3211.1 (05/96) TMN management service: Fault		M.3640 (10/92) Management of the D-channel – Data link layer and network layer							
			of the ISDN		21pp	E 3619	F 3618	S 3620	15 CHF
8pp E 7234 F 7236 S 7237 9 CHF <b>M.3300 (06/98)</b> TMN F interface requirements			the mana	<b>0/94)</b> Management of the D-channel	he data linl				
28pp	E 13967	F 13968	S 13969	17 CHF	30pp	E 6025	F 6024	S 6026	20 CHF
			17 0111		<b>4/97)</b> Netv				
M.3320 (04/97) Management requirements framework for the TMN X-Interface				of ISDN	calls	-			
32pp	E 11811	F 11812	S 11813	17 CHF	84pp	E 11889	F 11890	S 11891	39 CHF
M.3400 (02)	(00) TM	N Manager	nent Functio	ns	M.3660 (1 services	<b>0/92)</b> ISD	N interface	managemen	nt
108pp	E 19730	F 19731	S 19732	44 CHF	5pp	E 3522	F 3521	S 3523	8 CHF

#### Common channel signalling systems

**M.4010 (10/92)** Inter-Administration agreements on common channel Signalling System No. 6

5pp E 3398 F 3397 S 3399 8 CHF

**M.4030 (10/92)** Transmission characteristics for setting up and lining up a transfer link for common channel Signalling System No. 6 (analogue version)

5pp E 3531 F 3530 S 3532 8 CHF

**M.4100 (05/96)** Maintenance of common channel Signalling System No. 7

12pp E 7238 F 7239 S 7240 12 CHF

**M.4110 (05/96)** Inter-Administration agreements on common channel Signalling System No. 7

8pp E 7241 F 7242 S 7243 9 CHF

#### SERIES N

Maintenance: international sound programme and television transmission circuits

#### International sound-programme transmission

**N.1** (03/93) Definitions for application to international sound-programme and television-sound transmission

8pp E 5169 F 5225 S 5260 11 CHF

N.2 (11/88) Different types of sound-programme circuit

Individually through the Electronic Bookshop: 20 CHF

N.3 (11/88) Control circuits

*Individually through the Electronic Bookshop:* 20 CHF

**N.4 (11/88)** Definition and duration of the line-up period and the preparatory period

*Individually through the Electronic Bookshop:* 20 CHF

N.5 (11/88) Sound-programme control, sub-control and send reference stations

*Individually through the Electronic Bookshop:* 20 CHF

**N.10 (03/93)** Limits for the lining-up of international sound-programme links and connections

6pp E 4038 F 4037 S 4039 8 CHF

**N.11 (11/88)** Essential transmission performance objectives for international sound-programme centres (ISPC)

*Individually through the Electronic Bookshop:* 20 CHF

**N.12 (11/88)** Measurements to be made during the line-up period that precedes a sound-programme transmission

*Individually through the Electronic Bookshop:* 20 CHF

**N.13 (11/88)** Measurements to be made by the broadcasting organizations during the preparatory period

*Individually through the Electronic Bookshop:* 20 CHF

**N.15 (11/88)** Maximum permissible power during an international sound-programme transmission

Individually through the Electronic Bookshop: 20 CHF

N.16 (11/88) Identification signal

Individually through the Electronic Bookshop: 20 CHF

**N.17 (11/88)** Monitoring the transmission

*Individually through the Electronic Bookshop:* 20 CHF

**N.18 (11/88)** Monitoring for charging purposes, releasing

*Individually through the Electronic Bookshop:* 20 CHF

**N.21 (11/88)** Limits and procedures for the lining-up of a sound-programme circuit

Individually through the Electronic Bookshop: 20 CHF

**N.23 (11/88)** Maintenance measurements to be made on international sound-programme circuits

Individually through the Electronic Bookshop: 20 CHF

#### International television transmission

**N.51 (11/88)** Definitions for application to international television transmissions

*Individually through the Electronic Bookshop:* 20 CHF

**N.52 (11/88)** Multiple destination television transmissions and coordination centres

*Individually through the Electronic Bookshop:* 20 CHF

**N.54 (11/88)** Definition and duration of the line-up period and the preparatory period

Individually through the Electronic Bookshop: 20 CHF

**N.55** (03/93) 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

7pp E 4937 F 4936 S 4938 11 CHF

**N.60 (03/93)** Nominal amplitude of video signals at video interconnection points

3pp E 4237 F 4236 S 4238 8 CHF

N.61 (11/88) Measurements to be made before the line-up period that precedes a television transmission

*Individually through the Electronic Bookshop:* 20 CHF

**N.62 (03/93)** Tests to be made during the line-up period that precedes a television transmission

5pp E 4240 F 4239 S 4241 8 CHF

**N.63 (11/88)** Test signals to be used by the broadcasting organizations during the preparatory period

*Individually through the Electronic Bookshop:* 20 CHF

N.64 (11/88) Quality and impairment assessment

*Individually through the Electronic Bookshop:* 20 CHF

**N.67 (03/93)** Monitoring television transmissions – Use of the field blanking interval

12pp E 4284 F 4283 S 4285 11 CHF

N.73 (11/88) Maintenance of permanent international television circuits, links and connections

*Individually through the Electronic Bookshop:* 20 CHF

International videoconference transmission

#### N.81 (11/88) Withdrawn (03/99)

Definition for application to international videoconference transmissions

This subject had only been identified and was left for further study. Then it was abandonned and the empty Recommendation was deleted

*Individually through the Electronic Bookshop:* 20 CHF

#### N.86 (03/93) Withdrawn (03/99)

Line-up and service commissioning of international videoconference systems operating at transmission bit rates of 1544 and 2048 kbit/s

Deleted because no system or equipment have implemented it during the last two study periods

7pp E 4234 F 4233 S 4235 11 CHF

#### N.90 (03/93) Withdrawn (03/99)

Maintenance of international videoconference systems operating at transmission bit rates of 1544 and 2048 kbit/s

Deleted because no system or equipment have implemented it during the last two study periods

4pp E 4204 F 4203 S 4205 8 CHF

### **SERIES O**

# **Specifications of measuring equipment**

#### General

**O.1** (02/00) Scope and application of measurement equipment specifications covered in the O-series Recommendations

32pp E 19819 F 19820 S 19821 17 CHF

**O.3 (10/92)** Climatic conditions and relevant tests for measuring equipment

4pp E 3453 F 3452 S 3454 8 CHF

O.6 (11/88) 1020 Hz reference test frequency

Individually through the Electronic Bookshop: 20 CHF

**O.9 (03/99)** Measuring arrangements to assess the degree of unbalance about earth

20pp E 16144 F 16145 S 16146 17 CHF

Maintenance access

O.11 (10/92) Maintenance access lines

7pp E 3392 F 3391 S 3393 8 CHF

Automatic and semi-automatic measuring systems

**O.22 (10/92)** CCITT automatic transmission measuring and signalling testing equipment ATME No. 2

32pp E 3613 F 3612 S 3614 15 CHF

#### O.25 (11/88) Withdrawn (03/93)

Semiautomatic in-circuit echo suppressor testing system (ESTS)

Deleted after its content became technically out of date

**O.27 (11/88)** In-station echo canceller test equipment *Individually through the Electronic Bookshop:* 20 CHF

#### O.31 (11/88) Withdrawn (03/93)

Automatic measuring equipment for sound-programme circuits

Deleted after its content became technically out of date

#### O.32 (11/88) Withdrawn (03/93)

Automatic measuring equipment for stereophonic pairs of sound-programme circuits

Deleted after its content became technically out of date

**O.33 (07/95)** Automatic equipment for rapidly measuring stereophonic pairs and monophonic sound-programme circuits, links and connections

12pp E 6175 F 6174 S 6176 11 CHF

Equipment for the measurement of analogue parameters

**O.41 (10/94)** Psophometer for use on telephone-type circuits

This Recommendation is also included but not published in P series under alias number P.53

13pp E 5921 F 5920 S 5922 11 CHF

O.42 (11/88) Equipment to measure non-linear distortion using the 4-tone intermodulation method

*Individually through the Electronic Bookshop:* 20 CHF

O.51 (11/88) Withdrawn (03/93)

Volume meters

0.51 was an alias name of ITU-T P.52. Only this alias name was suppressed. ITU-T P.52 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

**O.61 (11/88)** Simple equipment to measure interruptions on telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**O.62 (11/88)** Sophisticated equipment to measure interruptions on telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**O.71 (11/88)** Impulsive noise measuring equipment for telephone-type circuits

This Recommendation is also included but not published in V series under alias number V.55

*Individually through the Electronic Bookshop:* 20 CHF

O.72 (10/84) Characteristics of an impulsive noise measuring instrument for wideband data transmissions

This Recommendation is published under alias number H.16.

Individually through the Electronic Bookshop: 20 CHF

**O.81 Appendix I Erratum (06/00)** Erratum to Recommendation ITU-T O.81/Appendix I (06/98)

**O.81 (11/88)** Group-delay measuring equipment for telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**O.81 Appendix I (06/98)** A measuring signal (multitone test signal) for fast measurement of amplitude and phase for telephone type circuits

Covering note, May 2000: Erratum

Formerly published as Supplement 3.7 in the Blue Book (1988), Fascicle IV.4, and then renumbered on 26 June 1998 as Appendix I to ITU-T O.81 without further modification.

8pp E 17234 F 17235 S 17236 9 CHF

**O.82 (11/88)** Group-delay measuring equipment for the range 5 to 600 kHz

*Individually through the Electronic Bookshop:* 20 CHF

**O.91 (11/88)** Phase jitter measuring equipment for telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**O.95 (11/88)** Phase and amplitude hit counters for telephone-type circuits

Individually through the Electronic Bookshop: 20 CHF

**O.111 (11/88)** Frequency shift measuring equipment for use on carrier channels

*Individually through the Electronic Bookshop:* 20 CHF

Equipment for the measurement of digital and analogue/digital parameters

**O.131 (11/88)** Quantizing distortion measuring equipment using a pseudo-random noise test signal

*Individually through the Electronic Bookshop:* 20 CHF

**O.132 (11/88)** Quantizing distortion measuring equipment using a sinusoidal test signal

*Individually through the Electronic Bookshop:* 20 CHF

**O.133 (03/93)** Equipment for measuring the performance of PCM encoders and decoders

26pp E 5062 F 5061 S 5063 15 CHF

**O.150 (05/96)** General requirements for instrumentation for performance measurements on digital transmission equipment

20pp E 9625 F 9626 S 9627 17 CHF

O.150 Corrigendum 1 (05/02)

**O.151 (10/92)** Error performance measuring equipment operating at the primary rate and above

5pp E 3417 F 3416 S 3418 8 CHF

O.151 Corrigendum 1 (05/02)

**O.152 (10/92)** Error performance measuring equipment for bit rates of 64 kbit/s and N x 64 kbit/s

4pp E 3360 F 3359 S 3361 8 CHF

**O.153 (10/92)** Basic parameters for the measurement of error performance at bit rates below the primary rate

6pp E 3363 F 3362 S 3364 8 CHF

**O.161 (11/88)** In-service code violation monitors for digital systems

*Individually through the Electronic Bookshop:* 20 CHF

**O.162 (10/92)** Equipment to perform in-service monitoring on 2048, 8448, 34 368 and 139 264 kbit/s signals

7pp E 3546 F 3545 S 3547 8 CHF

**O.163 (11/88)** Equipment to perform in-service monitoring on 1544 kbit/s signals

Individually through the Electronic Bookshop: 20 CHF

**O.171 (04/97)** Timing jitter and wander measuring equipment for digital systems which are based on the plesiochronous digital hierarchy (PDH)

32pp E 11780 F 11781 S 11782 17 CHF

**O.172 (03/01)** Jitter and wander measuring equipment for digital systems which are based on the synchronous digital hierarchy (SDH)

52pp E 20616 F 20616 S 20616 22 CHF

**O.181 (05/02)** Equipment to assess error performance on STM-N interfaces

44pp E 22354 F 22355 S 22356 22 CHF

**O.191 (02/00)** Equipment to measure the cell transfer performance of ATM connections

72pp E 18055 F 18056 S 18057 34 CHF

#### SERIES P

Telephone transmission quality, telephone installations, local line networks

Vocabulary and effects of transmission parameters on customer opinion of transmission quality

**P.10 (12/98)** Vocabulary of terms on telephone transmission quality and telephone sets

36рр E 15511 F 15512 S 15513 22 СНБ

P.11 (03/93) Effect of transmission impairments

32pp E 4955 F 4954 S 4956 15 CHF

**P.16 (11/88)** Subjective effects of direct crosstalk; thresholds of audibility and intelligibility

*Individually through the Electronic Bookshop:* 20 CHF

Subscribers' lines and sets

**P.32 (11/88)** Evaluation of the efficiency of telephone booths and acoustic hoods

Individually through the Electronic Bookshop: 20 CHF

#### P.33 (11/88) Withdrawn (09/97)

Subscriber telephone sets containing either loudspeaking receivers or microphones associated with amplifiers

Deleted after the relevant information contained in this Recommendation was incorporated in new ITU-T P.340 Individually through the Electronic Bookshop: 20 CHF

**P.38 (03/93)** Transmission characteristics of operator telephone systems (OTS)

2pp E 4314 F 4313 S 4315 8 CHF

#### Transmission standards

**P.48 (11/88)** Specification for an intermediate reference system

*Individually through the Electronic Bookshop:* 20 CHF

#### Objective measuring apparatus

P.50 (09/99) Artificial voices

Covering note, May 2000: Erratum

20pp E 17581 F 17582 S 17583 17 CHF

#### P.50 Appendix I (02/98) Test signals

This Appendix includes one CD-ROM containing the speech database for telephonometry applications.

Not available through Electronic Bookshop

To purchase, please contact Sales@itu.int

60pp E 14057 F 14058 S 14059 154 CHF

#### Objective measuring apparatus

**P.50 Erratum (05/00)** Erratum to Recommendation ITU-T P.50 (09/99)

#### Objective measuring apparatus

P.51 (08/96) Artificial mouth

12pp E 9874 F 9875 S 9876 12 CHF

**P.52 (03/93)** Volume meters

3pp E 4275 F 4274 S 4276 8 CHF

**P.53 (10/94)** Psophometer for use on telephone-type circuits

This Recommendation is published under alias number 0.41

**P.54 (11/88)** Sound level meters (apparatus for the objective measurement of room noise)

*Individually through the Electronic Bookshop:* 20 CHF

**P.55 (11/88)** Apparatus for the measurement of impulsive noise

*Individually through the Electronic Bookshop:* 20 CHF

**P.56 (03/93)** Objective measurement of active speech level

Corresponding ANSI-C code is available in the SV56 module of the ITU-T G.191 Software Tools Library

12pp E 4704 F 4703 S 4705 11 CHF

P.57 (07/02) Artificial ears

To be published...

**P.58 (08/96)** Head and torso simulator for telephonometry

36pp E 9654 F 9655 S 9656 22 CHF

P.58 Erratum 1 (01/03)

To be published...

P.59 (03/93) Artificial conversational speech

4pp E 4584 F 4583 S 4585 8 CHF

Objective electro-acoustical measurements

**P.61 (11/88)** Methods for the calibration of condenser microphones

*Individually through the Electronic Bookshop:* 20 CHF

P.62 (03/93) Withdrawn (06/98)

Measurements on subscribers' telephone equipment

P.62 is out of date and was deleted. The relevant text therein will be transferred to ITU-T P.35 during its revision

2pp E 4278 F 4277 S 4279 8 CHF

P.63 (11/88) Withdrawn (09/97)

Methods for the evaluation of transmission quality on the basis of objective measurements

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

*Individually through the Electronic Bookshop:* 20 CHF

**P.64 (09/99)** Determination of sensitivity/frequency characteristics of local telephone systems

Covering note, May 2000: Erratum

28pp E 17464 F 17465 S 17466 17 CHF

P.64 Erratum (05/00) Erratum to Recommendation ITU-T P.64 (09/99)

P.65 (03/93) Withdrawn (06/98)

Objective instrumentation for the determination of loudness ratings

P.65 is out of date and was deleted. The relevant text therein was transferred to ITU-T P.64

5pp E 4587 F 4586 S 4588 8 CHF

P.66 (03/93) Withdrawn (08/96)

Methods for evaluating the transmission performance of digital telephone sets

Deleted after having been merged with P.31 into ITU-T P.310

Measurements related to speech loudness

**P.75 (11/88)** Standard conditioning method for handsets with carbon microphones

Individually through the Electronic Bookshop: 20 CHF

**P.76 (11/88)** Determination of loudness ratings; fundamental principles

*Individually through the Electronic Bookshop:* 20 CHF

P.78 (02/96) Subjective testing method for determination of loudness ratings in accordance with Recommendation P.76

20pp E 7209 F 7210 S 7211 17 CHF

**P.79 (09/99)** Calculation of loudness ratings for telephone sets

Covering note, May 2000: Erratum

Covering note, 24 October 2000: Corrigendum 1

36pp E 17584 F 17585 S 17586 22 CHF

P.79 Annex G (11/01) Wideband loudness rating algorithm

8pp E 22188 F 22189 S 22190 9 CHF

P.79 Corrigendum 1 (10/00)

P.79 Corrigendum 2 (05/01)

**P.79 Erratum 1 (05/00)** Erratum to Recommendation ITU-T P.79 (09/99)

Methods for objective and subjective assessment of quality

**P.82 (11/88)** Method for evaluation of service from the standpoint of speech transmission quality

*Individually through the Electronic Bookshop:* 20 CHF

**P.84 (03/93)** Subjective listening test method for evaluating digital circuit multiplication and packetized voice systems

19pp E 4674 F 4673 S 4675 15 CHF

**P.85 (06/94)** A method for subjective performance assessment of the quality of speech voice output devices

9pp E 5585 F 5584 S 5586 11 CHF

Subscribers' lines and sets

**P.300 (11/01)** Transmission performance of group audio terminals (GATs)

20pp E 21681 F 21682 S 21683 12 CHF

Subscribers' lines and sets

**P.310 (05/00)** Transmission characteristics for telephone-band (300-3400 Hz) digital telephones

32pp E 19406 F 19407 S 19408 17 CHF

**P.311 (02/98)** Transmission characteristics for wideband (150-7000 Hz) digital handset telephones

20pp E 13191 F 13192 S 13193 17 CHF

**P.313 (09/99)** Transmission characteristics for cordless and mobile digital terminals

24pp E 17593 F 17594 S 17595 17 CHF

**P.340 (05/00)** Transmission characteristics of hands-free telephones

44pp E 19665 F 19666 S 19667 22 CHF

**P.341 (02/98)** Transmission characteristics for wideband (150-7000 Hz) digital hands-free telephony terminals

20pp E 13522 F 13523 S 13524 17 CHF

#### P.341 Corrigendum 1 (09/99)

**P.342 (05/00)** Transmission characteristics for telephone band (300-3400 Hz) digital loudspeaking and hands-free telephony terminals

20pp E 19552 F 19553 S 19554 17 CHF

**P.350 (03/01)** Handset dimensions – Formerly ITU-T P.35

12pp E 20566 F 20567 S 20568 9 CHF

**P.360 (12/98)** Efficiency of devices for preventing the occurrence of excessive acoustic pressure by telephone receivers

Former Rec. P.36, renumbered P.360

12pp E 14550 F 14551 S 14552 12 CHF

**P.370 (08/96)** Coupling Hearing Aids to Telephone sets

Former Rec. P.37, renumbered P.370

20pp E 9944 F 9945 S 9946 17 CHF

#### Objective measuring apparatus

**P.501 (05/00)** Test signals for use in telephonometry

This Recommendation includes an electronic attachment containing test signals for telephonometry applications.

37pp E 19888 F 19889 S 19890 72 CHF

**P.501 Erratum 1 (09/01)** Erratum to Recommendation ITU-T P.501 (05/00)

**P.502 (05/00)** Objective test methods for speech communication systems using complex test signals

2pp E 20052 F 20053 S 20054 29 CHF

**P.502 Erratum 1 (07/01)** Erratum to Recommendation ITU-T P.502 (05/00)

#### Objective measuring apparatus

P.561 (07/02) In-service non-intrusive measurement device – Voice service measurementsTo be published...

Objective measuring apparatus

**P.562 (05/00)** Analysis and interpretation of INMD voice-services measurements

56pp E 19314 F 19315 S 19316 29 CHF

**P.581 (05/00)** Use of head and torso simulator (HATS) for hands-free terminal testing

12pp E 19492 F 19493 S 19494 12 CHF

Methods for objective and subjective assessment of quality

**P.800 (08/96)** Methods for subjective determination of transmission quality

Former Rec. P.80, renumbered P.800

36pp E 9713 F 9714 S 9715 22 CHF

**P.810 (02/96)** Modulated noise reference unit (MNRU)

Corresponding ANSI-C code is available in the MNRU module of the ITU-T G.191 Software Tools Library

12pp E 7139 F 7140 S 7141 12 CHF

**P.830 (02/96)** Subjective performance assessment of telephone-band and wideband digital codecs

24pp E 7163 F 7164 S 7165 17 CHF

**P.831 (12/98)** Subjective performance evaluation of network echo cancellers

32pp E 15473 F 15474 S 15475 17 CHF

Methods for objective and subjective assessment of quality

**P.832 (05/00)** Subjective performance evaluation of hands-free terminals

28pp E 19427 F 19428 S 19429 17 CHF

**P.833 (02/01)** Methodology for derivation of equipment impairment factors from subjective listening-only tests

24pp E 21045 F 21046 S 21047 17 CHF

Methods for objective and subjective assessment of quality

**P.834 (07/02)** Methodology for derivation of equipment impairment factors from instrumental models

E 22974 F 22975 S 22976 67 CHF

#### P.861 (02/98) Withdrawn (07/01)

Objective quality measurement of telephone-band (300-3400 Hz) speech codecs

P.861 was recognized as having certain limitations in specific areas of application. It was replaced by P.862, which contains an improved objective speech quality assessment algorithm. P.861 included one diskette containing test vectors for implementation verification of the PSQM algorithm

40pp E 13580 F 13581 S 13582 62 CHF

Methods for objective and subjective assessment of quality

P.862 (02/01) Perceptual evaluation of speech quality (PESQ), an objective method for end-to-end speech quality assessment of narrowband telephone networks and speech codecs

30pp E 22134 F 22135 S 22136 67 CHF

Audiovisual quality in multimedia services

**P.910 (09/99)** Subjective video quality assessment methods for multimedia applications

36pp E 17681 F 17682 S 17683 22 CHF

**P.911 (12/98)** Subjective audiovisual quality assessment methods for multimedia applications

28pp E 15366 F 15367 S 15368 17 CHF

P.911 Corrigendum 1 (09/99)

**P.920 (05/00)** Interactive test methods for audiovisual communications

16pp E 19323 F 19324 S 19325 12 CHF

**P.930 (08/96)** Principles of a reference impairment system for video

36pp E 9736 F 9737 S 9738 22 CHF

**P.931 (12/98)** Multimedia communications delay, synchronization and frame rate measurement

48pp E 14613 F 14614 S 14615 22 CHF

#### **Supplements to the Series P Recommendations**

**Suppl. 10 (11/88)** Considerations relating to transmission characteristics for analogue handset telephones

20 CHF

**Suppl. 16 (11/88)** Guidelines for placement of microphones and loudspeakers in telephone conference rooms [1] and for Group Audio Terminals (GATs)

20 CHF

**Suppl. 20 (03/93)** Examples of measurements of handset receive-frequency responses: dependence on earcap leakage losses

5pp E 4844 F 4843 S 4845 8 CHF

#### Suppl. 23 (02/98) ITU-T coded-speech database

This Supplement includes 3 CD-ROMs containing the ITU-T coded speech database for 8 kbit/s codec tests.

Note: Not available through Electronic Bookshop. To purchase, please contact Sales@itu.int

10pp E 14061 F 14062 S 14063 287 CHF

#### **SERIES Q**

### Switching and signalling

**Suppl. 39 (02/03)** Technical Report TRQ.2700: Requirements for signalling in access networks that support BICC

193pp E 22760 F 22761 S 22762 73 CHF

#### Signalling in the international manual service

Q.1 (11/88) Signal receivers for manual working

Individually through the Electronic Bookshop: 20 CHF

Q.2 (11/88) Signal receivers for automatic and semi-automatic working, used for manual working *Individually through the Electronic Bookshop:* 20 CHF

# International automatic and semi-automatic working

#### Basic Recommendations

**Q.4 (11/88)** Automatic switching functions for use in national networks

Individually through the Electronic Bookshop: 20 CHF

**Q.5** (11/88) Advantages of semi-automatic service in the international telephone service

*Individually through the Electronic Bookshop:* 20 CHF

**Q.6 (11/88)** Advantages of international automatic working

*Individually through the Electronic Bookshop:* 20 CHF

Q.7 (11/88) Signalling systems to be used for international automatic and semi-automatic telephone working

*Individually through the Electronic Bookshop:* 20 CHF

**Q.8 (11/88)** Signalling systems to be used for international manual and automatic working on analogue leased circuits

Individually through the Electronic Bookshop: 20 CHF

Q.9 (11/88) Vocabulary of switching and signalling terms

*Individually through the Electronic Bookshop:* 39 CHF

Numbering plan and dialling procedures in the international service

#### Q.10 (11/88) Withdrawn (03/93)

Definitions relating to national and international numbering plans

Deleted Q.10 was an extract of ITU-T E.160. E.160 was later replaced by ITU-T E.164

*Individually through the Electronic Bookshop:* 20 CHF

#### Q.11ter (11/88) Withdrawn (03/93)

Timetable for coordinated implementation of the full capability of the numbering plan for the ISDN era (Recommendation E.164)

Q.11 ter was an alias name of ITU-T E.165. Only this alias name was suppressed. ITU-T E.165 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### Q.11bis (08/91) Withdrawn (03/93)

Numbering plan for the ISDN era

Q.11 bis was an alias name of ITU-T E.164. Only this alias name was suppressed. ITU-T E.164 remains valid

Routing plan for international service

Q.12 (11/88) Overflow – alternative routing – rerouting – automatic repeat attempt

*Individually through the Electronic Bookshop:* 20 CHF

#### O.13 (11/88) Withdrawn (03/93)

International telephone routing plan

Q.13 was an alias name of ITU-T E.171. Only this alias name was suppressed. ITU-T E.171 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

**Q.14 (11/88)** Means to control the number of satellite links in an international telephone connection

*Individually through the Electronic Bookshop:* 20 CHF

#### Q.15 (11/88) Withdrawn (03/93)

Nominal mean power during the busy hour

Deleted Q.15 was an extract of ITU-T G.223. ITU-T G.223 remains valid

Individually through the Electronic Bookshop: 20 CHF

#### Q.16 (11/88) Withdrawn (03/93)

Maximum permissible value for the absolute power level of a signalling pulse

Q.16 was an alias name of ITU-T G.224. Only this alias name was suppressed. ITU-T G.224 remains valid

Individually through the Electronic Bookshop: 20 CHF

General Recommendations relative to signalling and switching systems (national or international)

Q.20 (11/88) Comparative advantages of "in-band" and "out-band" systems

Individually through the Electronic Bookshop: 20 CHF

**Q.21 (11/88)** Systems recommended for out-band signalling

*Individually through the Electronic Bookshop:* 20 CHF

**Q.22 (11/88)** Frequencies to be used for in-band signalling

*Individually through the Electronic Bookshop:* 20 CHF

**Q.23 (11/88)** Technical features of push-button telephone sets

*Individually through the Electronic Bookshop:* 20 CHF

**Q.24 (11/88)** Multifrequency push-button signal reception

*Individually through the Electronic Bookshop:* 20 CHF

**Q.25 (11/88)** Splitting arrangements and signal recognition times in "in-band" signalling systems

*Individually through the Electronic Bookshop:* 20 CHF

**Q.26 (11/88)** Direct access to the international network from the national network

Individually through the Electronic Bookshop: 20 CHF

**Q.27 (11/88)** Transmission of the answer signal *Individually through the Electronic Bookshop:* 20 CHF

Q.28 (11/88) Determination of the moment of the called subscriber's answer in the automatic service

Individually through the Electronic Bookshop: 20 CHF

Q.29 (11/88) Causes of noise and ways of reducing noise in telephone exchanges

Individually through the Electronic Bookshop: 20 CHF

Q.30 (11/88) Improving the reliability of contacts in speech circuits

Individually through the Electronic Bookshop: 20 CHF

Q.31 (11/88) Noise in a national 4-wire automatic exchange

Individually through the Electronic Bookshop: 20 CHF

**Q.32 (11/88)** Reduction of the risk of instability by switching means

*Individually through the Electronic Bookshop:* 20 CHF

**Q.33 (11/88)** Protection against the effects of faulty transmission on groups of circuits

*Individually through the Electronic Bookshop:* 20 CHF

#### **International operation**

Tones in national signalling systems

Q.35/E.180 (03/98) Technical characteristics of tones for the telephone service

This Recommendation is published with the double number E.180 and Q.35

16pp E 13110 F 13111 S 13112 12 CHF

# International automatic and semi-automatic working

Tones for use in national signalling systems

#### Q.36 (11/88) Withdrawn (03/93)

Customer recognition of foreign tones

Q.36 was an alias name of ITU-T E.181. Only this alias name was suppressed. ITU-T E.181 remains valid

Individually through the Electronic Bookshop: 20 CHF

General characteristics for international telephone connections and circuits

#### Q.40 (11/88) Withdrawn (03/93)

The transmission plan

Deleted Q.40 was an extract of ITU-T G.101. ITU-T G.101 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### Q.41 (11/88) Withdrawn (03/93)

Mean one-way propagation time

Deleted Q.41 was an extract of ITU-T G.114. ITU-T G.114 remains valid

Individually through the Electronic Bookshop: 20 CHF

#### Q.42 (11/88) Withdrawn (03/93)

Stability and echo (echo suppressors)

Q.42 was an alias name of ITU-T G.131. Only this alias name was suppressed. ITU-T G.131 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### Q.43 (11/88) Withdrawn (03/93)

Transmission losses, relative levels

Deleted Q.43 was an extract of ITU-T G.101. ITU-T G.101 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### Q.44 (11/88) Attenuation distortion

Individually through the Electronic Bookshop: 20 CHF

Q.45 (10/84) Transmission characteristics of an analogue international exchange

Electronic Bookshop only

20 CHF

**Q.45bis (11/88)** Transmission characteristics of an analogue international exchange

*Individually through the Electronic Bookshop:* 20 CHF

Signalling for satellite systems

**Q.48 (11/88)** Demand assignment signalling systems *Individually through the Electronic Bookshop:* 20 CHF

#### Q.49 (10/92) Withdrawn (03/93)

CCITT automatic transmission measuring and signalling testing equipment ATME No. 2

Q.49 was an alias name of ITU-T O.22. Only this alias name was suppressed. ITU-T O.22 remains valid

*Individually through the Electronic Bookshop:* 20 CHF

#### Signalling for circuit multiplication equipment

Q.50 (07/01) Signalling between Circuit Multiplication Equipment (CME) and International Switching Centres (ISC)

27pp E 21781 F 21782 S 21783 17 CHF

Q.50.1 (07/01) Signalling between international switching centres (ISC) and digital circuit multiplication equipment (DCME) including the control of compression/decompression

20pp E 21809 F 21810 S 21811 12 CHF

Q.50.2 (12/02) Signalling between International Switching Centres (ISC) and Digital Circuit Multiplication Equipment (DCME) including the control of compression/decompression over an IP network

To be published...

Q.52 (03/01) Signalling between international switching centres and stand-alone echo control devices

14pp E 20563 F 20564 S 20565 12 CHF

Q.55 (12/99) Signalling between signal processing network equipment (SPNE) and international switching centres (ISC)

64pp E 19561 F 19562 S 19563 29 CHF

Q.56 (05/01) Signalling between signal processing network equipment (SPNE) and international switching centres (ISC) over an IP network

32pp E 21501 F 21502 S 21503 17 CHF

# **Functions and information flows for services in the ISDN**

#### Methodology

**Q.65** (06/00) The unified functional methodology for the characterization of services and network capabilities

60pp E 19764 F 19765 S 19766 29 CHF

Basic services	<b>Q.82.3 (03/93)</b> Call deflection
Q.68 (03/93) Overview of methodology for	Published with ITU-T Q.82.2.
developing management services	34pp E 4913 F 4912 S 4914 24 CHF
3pp E 4479 F 4478 S 4480 8 CHF	<b>Q.82.4 (11/88)</b> Line hunting
Q.71 (03/93) ISDN circuit mode switched bearer	Individually through the Electronic Bookshop: 20 CHF
services 143pp E 4826 F 4825 S 4827 47 CHF	Q.82.7 (07/96) Explicit call transfer
••	36pp E 9657 F 9658 S 9659 22 CHF
Q.72 (03/93) Stage 2 description for packet mode services	Q.83 Stage 2 description for call completion
36pp E 4522 F 4521 S 4523 20 CHF	supplementary services
Q.76 (02/95) Service procedures for Universal	<b>Q.83.1 (09/91)</b> Call waiting (CW)
Personal Telecommunication – Functional modelling	Published with ITU-T Q.83.4.
and information flows 75pp E 6093 F 6092 S 6094 30 CHF	13pp E 2352 F 2330 S 2374 13 CHF
	<b>Q.83.2 (02/92)</b> Call hold
Supplementary services	19pp E 2618 F 2649 S 2680 15 CHF
Q.80 (11/88) Introduction to stage 2 service	Q.83.3 (11/88) Stage 2 description for call
descriptions for supplementary services  Individually through the Electronic Bookshop: 20 CHF	completion supplementary services : Completion of call to busy subscriber
Q.81 Stage 2 description for number identification	Empty Recommendation. This service has only been
supplementary services	identified and requires further study.  20 CHF
<b>Q.81.1 (11/88)</b> Direct dialling-in	
Individually through the Electronic Bookshop: 20 CHF	<b>Q.83.4 (09/91)</b> Terminal portability <i>Published with ITU-T Q.83.1.</i>
Q.81.2 (02/92) Multiple subscriber number	13pp E 2352 F 2330 S 2374 13 CHF
Published with ITU-T Q.81.8.	
7pp E 2617 F 2648 S 2679 15 CHF	Q.84 Stage 2 description for multiparty supplementary services
Q.81.3 (09/91) Calling line identification presentation (CLIP) and calling line identification	
restriction (CLIR)	<b>Q.84.1</b> (03/93) Conference calling (CONF)
Published with ITU-T Q.81.5.	43pp E 4482 F 4481 S 4483 8 CHF
22pp E 2353 F 2331 S 2375 16 CHF	<b>Q.84.2 (10/95)</b> Three-party service
Q.81.5 (09/91) Connected line identification, presentation and restriction (COLP) and (COLR)	24pp E 6962 F 6961 S 6963 17 CHF
Published with ITU-T Q.81.3.	Q.85 Stage 2 description for community of
23pp E 2353 F 2331 S 2375 16 CHF	interest supplementary services
Q.81.7 (06/97) Malicious call identification (MCID)	<b>Q.85.1 (02/92)</b> Closed user group
This subject was only recognised and is for further study	Published with ITU-T Q.85.3.
28pp E 12299 F 12300 S 12301 17 CHF	24pp E 2713 F 2712 S 2714 33 CHF
<b>Q.81.8</b> (02/92) Sub-addressing (SUB)	Q.85.3 (02/92) Multi-level precedence and
Published with ITU-T Q.81.2.         8pp       E 2617       F 2648       S 2679       15 CHF	preemption (MLPP)
••	Published with ITU-T Q.85.1.         24pp       E 2713       F 2712       S 2714       33 CHF
Q.82 Stage 2 description for call offering supplementary services	24pp E 2713 F 2712 S 2714 33 CHF <b>Q.85.6 (02/95)</b> Global Virtual Network Service
<b>Q.82.1 (11/88)</b> Call transfer	(GVNS)
Empty Recommendation. This subject was only recognised	31pp E 6019 F 6018 S 6020 20 CHF
and is for further study.  Q.82.2 (03/93) Call forwarding  Published with ITU-T Q.82.3.	<b>Q.85.6 Annex A (07/96)</b> Service procedures and information flows based on Intelligent Network CS-1 capabilities
Published with 11U-1 Q.82.3. 51pp E 4913 F 4912 S 4914 24 CHF	60pp E 10343 F 10344 S 10345 29 CHF

51pp E 4913 F 4912 S 4914 24 CHF

Q.86 Stage 2 description for charging supplementary services

Q.86.1 (11/88) Credit card call

Empty Recommendation. This service has only been identified and requires further study.

**Q.86.2 (10/95)** Advice of charge (AOC)

40pp E 7009 F 7010 S 7011 22 CHF

**Q.86.3 (03/93)** Reverse charging (REV)

46pp E 5050 F 5049 S 5051 20 CHF

**Q.86.4 (06/97)** International Freephone Service (IFS) 20pp E 12236 F 12237 S 12238 17 CHF

Q.86.7 (10/95) International Telecommunication Charge Card (ITCC)

32pp E 6828 F 6829 S 6830 17 CHF

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

Q.87.1 (03/93) User-to-user signalling (UUS)

56pp E 5203 F 5240 S 5276 24 CHF

Q.87.2 (11/88) User signalling bearer services

Empty Recommendation. This service has only been identified and requires further study.

#### Clauses applicable to ITU-T standard systems

General clauses

**Q.101 (11/88)** Facilities provided in international semi-automatic working

*Individually through the Electronic Bookshop:* 20 CHF

Q.102 (11/88) Facilities provided in international automatic working

*Individually through the Electronic Bookshop:* 20 CHF

Q.103 (11/88) Numbering used

*Individually through the Electronic Bookshop:* 20 CHF

**Q.104 (11/88)** Language digit or discriminating digit *Individually through the Electronic Bookshop:* 20 CHF

Q.105 (11/88) National (significant) number

Individually through the Electronic Bookshop: 20 CHF

Q.106 (11/88) The sending-finished signal

Individually through the Electronic Bookshop: 20 CHF

**Q.107bis (03/93)** Analysis of forward address information for routing

5pp E 4985 F 4984 S 4986 8 CHF

Q.107 (11/88) Standard sending sequence of forward address information

*Individually through the Electronic Bookshop:* 20 CHF

**Q.108 (11/88)** One-way or both-way operation of international circuits

*Individually through the Electronic Bookshop:* 20 CHF

Q.109 (11/88) Transmission of the answer signal in international exchanges

*Individually through the Electronic Bookshop:* 20 CHF

Transmission clauses for signalling

Q.110 (11/88) General aspects of the utilization of standardized CCITT signalling systems on PCM links

Individually through the Electronic Bookshop: 20 CHF

**Q.112 (11/88)** Signal levels and signal receiver sensitivity

*Individually through the Electronic Bookshop:* 20 CHF

**Q.113 (11/88)** Connection of signal receivers in the circuit

*Individually through the Electronic Bookshop:* 20 CHF

**Q.114 (11/88)** Typical transmission requirements for signal senders and receivers

*Individually through the Electronic Bookshop:* 20 CHF

Control of echo suppressors

Q.115.1 (12/02) Clauses applicable to ITU-T standard systems logic and protocols for the control of signal processing network elements and functions: Logic for the control of echo control devices

Formerly Rec. Q.115

To be published...

Abnormal conditions

**Q.116 (11/88)** Indication given to the outgoing operator or calling subscriber in case of an abnormal condition

Individually through the Electronic Bookshop: 20 CHF

Q.117 (11/88) Alarms for technical staff and arrangements in case of faults

*Individually through the Electronic Bookshop:* 20 CHF

Q.118 (09/97) Abnormal conditions – Special release arrangements

8pp E 12447 F 12448 S 12449 9 CHF

**Q.118bis (11/88)** Indication of congestion conditions at transit exchanges

*Individually through the Electronic Bookshop:* 20 CHF

Specification of Signalling Systems No. 4 and No. 5

Specifications of Signalling System No. 4

Q.120-139 (11/88) Specifications of Signalling System No. 4

48pp E 22567 F 22567 S 22567 22 CHF

Q.120 (11/88) Definition and function of sign Individually through the Electronic Bookshop:	nals 20 CHF	Q.139 (11/88) Manual testing  Individually through the Electronic Bookshop: 20 CHF
Q.121 (11/88) Signal code  Individually through the Electronic Bookshop:	20 CHF	Specifications of Signalling System No. 5
Q.122 (11/88) Signal sender		Q.140 (11/88) Definition and function of signals  Individually through the Electronic Bookshop: 20 CHF
Individually through the Electronic Bookshop:	20 CHF	Q.140-Q.180 (11/88) Specifications of Signalling
Q.123 (11/88) Signal receiver Individually through the Electronic Bookshop:	20 CHF	System No. 5 68pp E 22645 F 22645 S 22645 29 CHF
<b>Q.124 (11/88)</b> Splitting arrangements <i>Individually through the Electronic Bookshop:</i>	20 CHF	Q.141 (03/93) Signal code for line signalling  Clause 2 (03/93) – Line signalling
Q.125 (11/88) Speed of switching in internat exchanges	ional	6pp E 4991 F 4990 S 4992 8 CHF <b>Q.142 (11/88)</b> Double seizing with both-way
Individually through the Electronic Bookshop:	20 CHF	operation
Q.126 (11/88) Analysis and transfer of digital information	al	Individually through the Electronic Bookshop: 20 CHF  Q.143 (11/88) Line signal sender
Empty Recommendation referring to Q.107 bis		Individually through the Electronic Bookshop: 20 CHF
Q.127 (11/88) Release of registers  Individually through the Electronic Bookshop:	20 CHF	<b>Q.144 (03/93)</b> Line signal receiver 3pp E 4548 F 4547 S 4549 8 CHF
Q.128 (11/88) Switching to speech position <i>Individually through the Electronic Bookshop:</i>	20 CHF	Q.145 (11/88) Splitting arrangements  Individually through the Electronic Bookshop: 20 CHF
<b>Q.129 (11/88)</b> Maximum duration of a block signal <i>Individually through the Electronic Bookshop:</i>	ing 20 CHF	Q.146 (11/88) Speed of switching in international exchanges
		Individually through the Electronic Bookshop: 20 CHF
<b>Q.130 (11/88)</b> Special arrangements in case of failures in the sequence of signals  Individually through the Electronic Bookshop:	20 CHF	Q.151 (11/88) Signal code for register signalling  Individually through the Electronic Bookshop: 20 CHF
Q.131 (11/88) Abnormal release conditions of outgoing register causing release of the intercircuit	of the	Q.152 (11/88) End-of-Pulsing conditions – Register arrangements concerning ST (end-of-pulsing) signal <i>Individually through the Electronic Bookshop:</i> 20 CHF
Individually through the Electronic Bookshop:	20 CHF	Q.153 (11/88) Multifrequency signal sender  Individually through the Electronic Bookshop: 20 CHF
Q.133 (11/88) Numbering for access to autor measuring and testing devices	natic	Q.154 (11/88) Multifrequency signal receiver
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 CHF
Q.134 (11/88) Routine testing of equipment maintenance)		Q.155 (11/88) Analysis of digital information for routing
Individually through the Electronic Bookshop:	20 CHF	Empty Recommendation referring to Q.107 bis
Q.135 (11/88) Principles of rapid transmission testing equipment		Q.156 (11/88) Release of international registers  Individually through the Electronic Bookshop: 20 CHF
<ul><li>Individually through the Electronic Bookshop:</li><li>Q.136 (11/88) Loop transmission measurement Individually through the Electronic Bookshop:</li></ul>	20 CHF ents 20 CHF	Q.157 (11/88) Switching to the speech position  Individually through the Electronic Bookshop: 20 CHF
Q.137 (11/88) Automatic testing equipment Individually through the Electronic Bookshop:	20 CHF	Q.161 (11/88) General arrangements for manual testing  Empty Recommendation referring to Q.107 bis
Q.138 (11/88) Instruments for checking equi		Q.162 (11/88) Routine testing of equipment (local
and measuring signals		maintenance)
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 CHF

Individually through the Electronic Bookshop:	20 CHF	O 2(1 (11/00) Normal and and	
O 1(4 (11/99) Testing a suinment for sheeling		Q.261 (11/88) Normal call set-up	
Q.164 (11/88) Testing equipment for checking equipment and signals		Individually through the Electronic Bookshop: 20 C	CHF
Individually through the Electronic Bookshop:	20 CHF	Q.262 (11/88) Analysis of digital information for routing	
Interworking of Signalling Systems No. 4 an No. 5	d	Empty Recommendation referring to Q.107 bis	
Q.180 (11/88) Interworking of signalling syste	ms	Q.263 (11/88) Double seizing with both-way operation	
No. 4 and No. 5		Individually through the Electronic Bookshop: 20 C	CHF
, ,	20 CHF	Q.264 (11/88) Potential for automatic repeat attemand re-routing	pt
<b>Specifications of Signalling System No. 6</b>		Individually through the Electronic Bookshop: 20 C	CHF
Functional description of the signalling system	em	Q.265 (11/88) Speed of switching and signal trans in international exchanges	fer
Q.251 (11/88) General	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Individually through the Electronic Bookshop:	20 CHF		
Q.251-Q.300 (11/88) Specifications of Signall System No. 6	ing	Q.266 (11/88) Blocking and unblocking sequences and control of quasi-associated signalling	8
148pp E 22564 F 22565 S 22566	55 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Q.252 (11/88) Signal transfer time definitions		Q.267 (11/88) Unreasonable and superfluous messages	
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Q.253 (11/88) Association between signalling speech networks		Q.268 (11/88) Release of international connections and associated equipment	S
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Definition and function of signals		Continuity check of the speech path	
<b>Q.254 (11/88)</b> Telephone signals		Q.271 (11/88) General	
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	HF
Q.255 (11/88) Signalling-system-control signa	ls	20 C	
Individually through the Electronic Bookshop:	20 CHF	Signalling link	
Q.256 (11/88) Management signals  Individually through the Electronic Bookshop:	20 CHF	Q.272 (11/88) Requirements for the signalling data link	a
,		Individually through the Electronic Bookshop: 20 C	CHF
Signal unit formats and codes		Q.273 (11/88) Data transmission rate	
Q.257 (11/88) General		Individually through the Electronic Bookshop: 20 C	CHF
Individually through the Electronic Bookshop:	20 CHF	Q.274 (11/88) Transmission methods – Modem an	
<b>Q.258 (11/88)</b> Telephone signals		interface requirements	
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Q.259 (11/88) Signalling-system-control signa	ls	Q.275 (11/88) Data channel failure detection	
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Q.260 (11/88) Management signals		Q.276 (11/88) Service dependability	
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF

Signalling procedures

**Q.163 (11/88)** Manual testing

Q.277 (11/88) Error control  Individually through the Electronic Bookshop: 20 CHF	Q.310-Q.332 (11/88) Specifications of Signalling System R1
Q.278 (11/88) Synchronization	10pp E 21525 F 21526 S 21527 9 CHF
Individually through the Electronic Bookshop: 20 CHF	Line signalling
Q.279 (11/88) Drift compensation  Individually through the Electronic Bookshop: 20 CHF	Q.311 (11/88) 2600 Hz line signalling  Individually through the Electronic Bookshop: 20 CHF
Signal traffic characteristics	Q.312 (11/88) 2600 Hz line signal sender
Q.285 (11/88) Signal priority categories  Individually through the Electronic Bookshop: 20 CHF	(transmitter)  Individually through the Electronic Bookshop: 20 CHF
Q.286 (11/88) Signalling channel loading and queueing delays	Q.313 (11/88) 2600 Hz line signal receiving equipment  Individually through the Electronic Bookshop: 20 CHF
Individually through the Electronic Bookshop: 20 CHF	, 0
Q.287 (11/88) Signal transfer time requirements  Individually through the Electronic Bookshop: 20 CHF	Q.314 (11/88) PCM line signalling  Individually through the Electronic Bookshop: 20 CHF
Security arrangements	Q.315 (11/88) PCM line signal sender (transmitter)  Individually through the Electronic Bookshop: 20 CHF
Q.291 (11/88) General Individually through the Electronic Bookshop: 20 CHF	Q.316 (11/88) PCM line signal receiver  Individually through the Electronic Bookshop: 20 CHF
Q.292 (11/88) Reserve facilities provided  Individually through the Electronic Bookshop: 20 CHF	Q.317 (11/88) Further specification clauses relative to line signalling
Q.293 (11/88) Intervals at which security measures	Individually through the Electronic Bookshop: 20 CHF
are to be invoked  Individually through the Electronic Bookshop: 20 CHF	Q.318 (11/88) Double seizing with both-way operation
Testing and maintenance	Individually through the Electronic Bookshop: 20 CHF
<b>Q.295 (11/88)</b> Overall tests of Signalling System No. 6	Q.319 (11/88) Speed of switching in international exchanges
Individually through the Electronic Bookshop: 20 CHF	Individually through the Electronic Bookshop: 20 CHF
Q.296 (11/88) Monitoring and maintenance of the common signalling channel	Register signalling
Individually through the Electronic Bookshop: 20 CHF	Q.320 (11/88) Signal code for register signalling Individually through the Electronic Bookshop: 20 CHF
Network management	Q.321 (11/88) End-of-pulsing conditions – Register
Q.297 (11/88) Network management  Individually through the Electronic Bookshop: 20 CHF	arrangements concerning ST signal  Individually through the Electronic Bookshop: 20 CHF
Interworking between ITU-T Signalling System No. 6 and national common channel signalling	Q.322 (11/88) Multifrequency signal sender  Individually through the Electronic Bookshop: 20 CHF
systems	Q.323 (11/88) Multifrequency signal receiving
Q.300 (11/88) Interworking between CCITT Signalling System No. 6 and national common	equipment  Individually through the Electronic Bookshop: 20 CHF
channel signalling systems  Individually through the Electronic Bookshop: 20 CHF	Q.324 (11/88) Analysis of address information for routing
Specifications of Signalling System R1	Individually through the Electronic Bookshop: 20 CHF
Definition and function of signals	Q.325 (11/88) Release of registers  Individually through the Electronic Bookshop: 20 CHF
Q.310 (11/88) Definition and function of signals  Individually through the Electronic Bookshop: 20 CHF	Q.326 (11/88) Switching to the speech position  Individually through the Electronic Bookshop: 20 CHF

		equipment	
Q.327 (11/88) General arrangements  Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Q.328 (11/88) Routine testing of equipment (lo	ocal	Q.424 (11/88) Protection against the effects of fau transmission	lty
,	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Q.329 (11/88) Manual testing  Individually through the Electronic Bookshop:	20 CHF	<b>Q.430 (11/88)</b> Conversion between analogue and digital versions of System R2 line signalling	
Q.330 (11/88) Automatic transmission and sign	nallina	Individually through the Electronic Bookshop: 20 C	CHF
testing	nannig	7	
Individually through the Electronic Bookshop:	20 CHF	Interregister signalling	
Q.331 (11/88) Test equipment for checking		Q.440 (11/88) General	
equipment and signals		Individually through the Electronic Bookshop: 20 C	CHF
Individually through the Electronic Bookshop:	20 CHF	Q.441 (11/88) Signalling code	
Interworking of Signalling System R1 with o standardized systems	ther	Individually through the Electronic Bookshop: 20 C	CHF
•		Q.442 (11/88) Pulse transmission of backward	
<b>Q.332 (11/88)</b> Interworking		signals A-3, A-4, A-6 or A-15. Multifrequency	
Specifications on interworking of System R1 with ot signalling systems are not yet available. Typical	her	signalling equipment	NI IF
information is found in Rec. Q.180	• • • • • • • • • • • • • • • • • • • •	Individually through the Electronic Bookshop: 20 C	HF
Individually through the Electronic Bookshop:	20 CHF	Q.450 (11/88) General	
Specifications of Signalling System R2		Individually through the Electronic Bookshop: 20 C	CHF
		<b>Q.451 (11/88)</b> Definitions	
Definition and function of signals		Individually through the Electronic Bookshop: 20 C	CHF
Q.400 (11/88) Forward line signals		Q.452 (11/88) Requirements relating to transmission	on
Individually through the Electronic Bookshop:	20 CHF	conditions	OII
Definition and function of signals		Individually through the Electronic Bookshop: 20 C	CHF
Q.400-Q.490 (11/88) Specifications of Signalls System R2	ing	Q.454 (11/88) The sending part of the multifrequency signalling equipment	
118pp E 21644 F 21645 S 21646	49 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Line signalling, analogue version		<b>Q.455 (11/88)</b> The receiving part of the multifrequency equipment	
Q.411 (11/88) Line signalling code  Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
, 0		Q.457 (11/88) Range of interregister signalling	
Q.412 (11/88) Clauses for exchange line signal equipment	lling	Individually through the Electronic Bookshop: 20 C	CHF
Individually through the Electronic Bookshop:	20 CHF	Q.458 (11/88) Reliability of interregister signalling	g
<b>Q.414 (11/88)</b> Signal sender		Individually through the Electronic Bookshop: 20 C	CHF
Individually through the Electronic Bookshop:	20 CHF		
Q.415 (11/88) Signal receiver		Signalling procedures	
- · · · · · · · · · · · · · · · · · · ·	20 CHF	Q.460 (11/88) Normal call set-up procedures for	
Q.416 (11/88) Interruption control		international working	
- · · · · · · · · · · · · · · · · · · ·	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF
Line signalling, digital version		Q.462 (11/88) Signalling between the outgoing international R2 register and an incoming R2 register.	ster
Q.421 (11/88) Digital line signalling code		in an international exchange	
Individually through the Electronic Bookshop:	20 CHF	Individually through the Electronic Bookshop: 20 C	CHF

Q.422 (11/88) Clauses for exchange line signalling

Testing arrangements

Q.463 (11/88) Signalling between the outgoing Q.480 (11/88) Miscellaneous procedures international R2 register and an incoming R2 register *Individually through the Electronic Bookshop:* 20 CHF in a national exchange in the destination country *Individually through the Electronic Bookshop:* 20 CHF Testing and maintenance Q.490 (11/88) Testing and maintenance Q.464 (11/88) Signalling between the outgoing international R2 register and the last incoming R2 Individually through the Electronic Bookshop: 20 CHF register Digital exchanges Individually through the Electronic Bookshop: 20 CHF Q.465 (11/88) Particular cases Introduction and field of application Individually through the Electronic Bookshop: 20 CHF Q.500 (11/88) Digital local, combined, transit and international exchanges – Introduction and field of Q.466 (11/88) Supervision and release of the call application Individually through the Electronic Bookshop: 20 CHF *Individually through the Electronic Bookshop:* 20 CHF Q.468 (11/88) Routing and numbering for Supplements to the Series Q.500 international working Recommendations Empty Recommendation referring to Q.107 and Q.107 bis Q.500 Series Supplement 2 (11/88) Impedance strategy for telephone instruments and digital local Q.470 (11/88) At an incoming R2 register situated in exchanges in the British Telecom Network a transit exchange Individually through the Electronic Bookshop: 20 CHF 20 CHF Individually through the Electronic Bookshop: Q.500 Series Supplement 1 (11/88) Definition of Q.471 (11/88) At the last incoming R2 register relative levels, transmission loss and situated in the exchange to which the called attenuation/frequency distortion for digital subscriber is connected exchanges with complex impedances at Z interfaces *Individually through the Electronic Bookshop:* 20 CHF Individually through the Electronic Bookshop: 20 CHF To be published... Q.472 (11/88) At the last incoming R2 register situated in a transit exchange **Digital exchanges** 20 CHF Individually through the Electronic Bookshop: Exchange interfaces, functions and connections Q.473 (11/88) Use of end-of-pulsing signal I-15 in international working Q.511 (11/88) Exchange interfaces towards other exchanges Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF **Q.474 (11/88)** Use of group B signals Q.512 (02/95) Digital exchange interfaces for Individually through the Electronic Bookshop: 20 CHF subscriber access 10pp E 5964 F 5963 S 5965 11 CHF Q.475 (11/88) Normal release of outgoing and incoming R2 registers Q.513 (03/93) Digital exchange interfaces for Individually through the Electronic Bookshop: 20 CHF operations, administration and maintenance E 4422 F 4421 S 4423 8 CHF Q.476 (11/88) Abnormal release of outgoing and incoming R2 registers Q.521 (03/93) Digital exchange functions E 4425 F 4424 S 4426 11 CHF 7pp Individually through the Electronic Bookshop: 20 CHF Q.522 (11/88) Digital exchange connections, Q.478 (11/88) Relay and regeneration of R2 signalling and ancillary functions interregister signals by an outgoing R2 register in a Individually through the Electronic Bookshop: 20 CHF transit exchange Individually through the Electronic Bookshop: 20 CHF Design objectives and measurement Q.479 (11/88) Echo-suppressor control – Signalling Q.541 (03/93) Digital exchange design objectives – requirements General Individually through the Electronic Bookshop: 20 CHF 6pp E 4428 F 4427 S 4429 8 CHF

ITU-T 02/03 - Series Q

101

**Q.606 (11/88)** Logic procedures Q.542 (03/93) Digital exchange design objectives – Operations and maintenance Individually through the Electronic Bookshop: 20 CHF E 4551 F 4550 S 4552 24 CHF 21pp Q.607 (11/88) Interworking requirements for new Q.543 (03/93) Digital exchange performance design signalling systems objectives Individually through the Electronic Bookshop: 20 CHF E 4904 F 4903 S 4905 20 CHF 36pp Q.608 (11/88) Miscellaneous interworking aspects Q.544 (11/88) Digital exchange measurements *Individually through the Electronic Bookshop:* 20 CHF *Individually through the Electronic Bookshop:* 20 CHF Logic procedures Transmission characteristics Q.611 (11/88) Logic procedures for incoming Q.551 (01/02) Transmission characteristics of digital signalling system No. 4 exchanges *Individually through the Electronic Bookshop:* 20 CHF 38pp E 22039 F 22040 S 22041 22 CHF Q.612 (11/88) Logic procedures for incoming Q.552 (11/01) Transmission characteristics at 2-wire signalling system No. 5 analogue interfaces of digital exchanges Individually through the Electronic Bookshop: 20 CHF E 21943 F 21945 44pp S 21946 22 CHF Q.613 (11/88) Logic procedures for incoming Q.553 (11/01) Transmission characteristics at 4-wire signalling system No. 6 analogue interfaces of digital exchanges Individually through the Electronic Bookshop: 20 CHF E 21585 F 21586 22pp S 21587 17 CHF Q.614 (03/93) Logic procedures for incoming Q.554 (11/96) Transmission characteristics at digital Signalling System No. 7 (TUP) interfaces of digital exchanges E 4877 F 4876 S 4878 11 CHF 16pp E 10486 F 10487 S 10488 9 CHF 8pp Q.615 (11/88) Logic procedures for incoming **Interworking of Signalling Systems** signalling system R1 Individually through the Electronic Bookshop: 20 CHF General considerations Q.616 (11/88) Logic procedures for incoming Q.601 (03/93) Interworking of signalling systems – signalling system R2 General Individually through the Electronic Bookshop: 20 CHF F 4640 S 4642 8 CHF 2pp E 4641 Q.617 (03/93) Logic procedures for incoming Q.601 Q.695 Annex A (03/93) Lists and meanings signalling system No. 7 (ISUP) of FITEs, BITEs and SPITEs - Representation of 18pp E 4925 F 4924 S 4926 15 CHF information contents of signals of the signalling systems Q.621 (11/88) Logic procedures for outgoing 31pp E 4964 F 4963 S 4965 15 CHF signalling system No. 4 Individually through the Electronic Bookshop: 20 CHF Q.601 Q.695 Annex B (03/93) Narrative presentation of interworking Q.622 (11/88) Logic procedures for outgoing F 4492 23pp E 4493 S 4494 20 CHF signalling system No. 5 Q.602 (03/93) Interworking of signalling systems – Individually through the Electronic Bookshop: 20 CHF Introduction Q.623 (11/88) Logic procedures for outgoing E 4620 F 4619 S 4621 8 CHF 3pp signalling system No. 6 Q.603 (11/88) Events Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF Q.624 (03/93) Logic procedures for outgoing Signalling System No. 7 (TUP) Q.604 (03/93) Interworking of signalling systems – Information analysis tables 11pp E 5003 F 5002 S 5004 11 CHF E 4431 F 4430 S 4432 8 CHF 2pp Q.625 (11/88) Logic procedures for outgoing signalling system R1 Q.605 (11/88) Drawing conventions Individually through the Electronic Bookshop: 20 CHF Individually through the Electronic Bookshop: 20 CHF

**Q.626 (11/88)** Logic procedures for outgoing signalling system R2

*Individually through the Electronic Bookshop:* 20 CHF

Q.627 (03/93) Logic procedures for outgoing Signalling System No. 7 (ISUP)

10pp E 4832 F 4831 S 4833 11 CHF

**Q.634 (11/88)** Logic procedures for interworking of signalling system No. 4 to R2

*Individually through the Electronic Bookshop:* 20 CHF

**Q.642 (11/88)** Logic procedures for interworking of signalling system No. 5 to No. 6

*Individually through the Electronic Bookshop:* 20 CHF

**Q.643 (11/88)** Logic procedures for interworking of signalling system No. 5 to No. 7 (TUP)

*Individually through the Electronic Bookshop:* 20 CHF

**Q.644 (11/88)** Logic procedures for interworking of signalling system No. 5 to R1

*Individually through the Electronic Bookshop:* 20 CHF

**Q.645 (11/88)** Logic procedures for interworking of signalling system No. 5 to R2

*Individually through the Electronic Bookshop:* 20 CHF

Q.646 (03/93) Logic procedures for interworking of Signalling System No. 5 to Signalling System No. 7 (ISUP)

7pp E 4515 F 4514 S 4516 8 CHF

**Q.652 (11/88)** Logic procedures for interworking of signalling system No. 6 to No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**Q.653 (11/88)** Logic procedures for interworking of signalling system No. 6 to No. 7 (TUP)

*Individually through the Electronic Bookshop:* 20 CHF

**Q.654 (11/88)** Logic procedures for interworking of signalling system No. 6 to R1

Individually through the Electronic Bookshop: 20 CHF

**Q.655 (11/88)** Logic procedures for interworking of signalling system No. 6 to R2

*Individually through the Electronic Bookshop:* 20 CHF

**Q.656 (03/93)** Logic procedures for interworking of Signalling System No. 6 to Signalling System No. 7 (ISUP)

10pp E 4533 F 4532 S 4534 11 CHF

**Q.662 (11/88)** Logic procedures for interworking of signalling system No. 7 (TUP) to No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**Q.663 (11/88)** Logic procedures for interworking of signalling system No. 7 (TUP) to No. 6

*Individually through the Electronic Bookshop:* 20 CHF

**Q.664 (11/88)** Logic procedures for interworking of signalling system No. 7 (TUP) to No. 7 (TUP)

*Individually through the Electronic Bookshop:* 20 CHF

**Q.665 (11/88)** Logic procedures for interworking of signalling system No. 7 (TUP) to R1

*Individually through the Electronic Bookshop:* 20 CHF

**Q.666 (11/88)** Logic procedures for interworking of signalling system No. 7 (TUP) to R2

*Individually through the Electronic Bookshop:* 20 CHF

Q.667 (03/93) Logic procedures for interworking of Signalling System No. 7 (TUP) to Signalling System No. 7 (ISUP)

8pp E 4602 F 4601 S 4603 8 CHF

**Q.671 (11/88)** Logic procedures for interworking of signalling system R1 to No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**Q.672 (11/88)** Logic procedures for interworking of signalling system R1 to No. 6

Individually through the Electronic Bookshop: 20 CHF

**Q.673 (11/88)** Logic procedures for interworking of signalling system R1 to No. 7 (TUP)

*Individually through the Electronic Bookshop:* 20 CHF

**Q.674 (11/88)** Logic procedures for interworking of signalling system R1 to R2

*Individually through the Electronic Bookshop:* 20 CHF

**Q.675 (03/93)** Logic procedures for interworking of Signalling System R1 to Signalling System No. 7 (ISUP)

7pp E 4931 F 4930 S 4932 8 CHF

**Q.681 (11/88)** Logic procedures for interworking of signalling system R2 to No. 4

*Individually through the Electronic Bookshop:* 20 CHF

**Q.682 (11/88)** Logic procedures for interworking of signalling system R2 to No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**Q.683 (11/88)** Logic procedures for interworking of signalling system R2 to No. 6

*Individually through the Electronic Bookshop:* 20 CHF

**Q.684 (11/88)** Logic procedures for interworking of signalling system R2 to No. 7 (TUP)

*Individually through the Electronic Bookshop:* 20 CHF

**Q.685 (11/88)** Logic procedures for interworking of signalling system R2 to R1

*Individually through the Electronic Bookshop:* 20 CHF

**Q.686 (03/93)** Logic procedures for interworking of Signalling System R2 to Signalling System No. 7 (ISUP)

7pp E 4683 F 4682 S 4684 11 CHF

**Q.690 (03/93)** Logic procedures for interworking of Signalling System No. 7 (ISUP) to No. 5

8pp E 4554 F 4553 S 4555 8 CHF

**Q.691 (03/93)** Logic procedures for interworking of Signalling System No. 7 (ISUP) to No. 6

6pp E 4635 F 4634 S 4636 8 CHF

**Q.692 (03/93)** Logic procedures for interworking of Signalling System No. 7 (ISUP) to No. 7 (TUP)

6pp E 4557 F 4556 S 4558 8 CHF

**Q.694 (03/93)** Logic procedures for interworking of signalling system No. 7 (ISUP) to R1

6pp E 4525 F 4524 S 4526 8 CHF

**Q.695 (03/93)** Logic procedures for interworking of Signalling System No. 7 (ISUP) to R2

8pp E 4485 F 4484 S 4486 38 CHF

**Q.696 (06/97)** Interworking between the Signalling System No. 7 ISDN User Part (ISUP) and Signalling Systems No. 5, R2 and Signalling System No. 7 TUP

48pp E 12308 F 12309 S 12310 22 CHF

Interworking of Signalling Systems No. 7 and No. 6

**Q.698 (03/93)** Interworking of Signalling System No. 7 ISUP, TUP and Signalling System No. 6 using arrow diagrams

50pp E 5029 F 5028 S 5030 24 CHF

Interworking between Digital Subscriber Signalling System No. 1 and Signalling System No. 7

Q.699 (09/97) Interworking between ISDN access and non-ISDN access over ISDN User Part of Signalling System No. 7

144pp E 13012 F 13013 S 13014 55 CHF

**Q.699 Addendum 1 (12/99)** DSS1-SS7 interworking for call completion on no reply

12pp E 18036 F 18037 S 18038 12 CHF

Q.699.1 (05/98) Interworking between ISDN access and non-ISDN access over ISDN user part of Signalling System No. 7: Support of VPN applications with PSS1 information flows

28pp E 14101 F 14102 S 14103 17 CHF

Specifications of Signalling System No. 7

General

**Q.700 (03/93)** Introduction to CCITT Signalling System No. 7

20pp E 4434 F 4433 S 4435 15 CHF

*Message transfer part (MTP)* 

**Q.701 (03/93)** Functional description of the message transfer part (MTP) of Signalling System No. 7

20pp E 4377 F 4376 S 4378 15 CHF

Q.702 (11/88) Signalling data link

Individually through the Electronic Bookshop: 20 CHF

**Q.703 (07/96)** Signalling link

92pp E 10442 F 10443 S 10444 39 CHF

Q.704 (07/96) messages	Signal	lling netwo	ork functions	and	Q.722 (11/88) General function of telephone messages and signals
_	e, 17.09.9	9: Erratum	(english only)		Individually through the Electronic Bookshop: 20 CHF
_	E 10627	F 10628	S 10629	96 CHF	
Q.705 (03/93)	Signal	lling netwo	ork structure		<b>Q.723 Amendment 1 (03/93)</b> Amendment 1 to ITU-T Q.723 (1988)
23pp	E 4437	F 4436	S 4438	15 CHF	Q.723 (11/88) Telephone user part formats and codes
0.706 (02/02)	Magaa	aa tranafar	nartaianalli		A Corrigendum was indicated in 03/1993.
Q.706 (03/93) performance		ige transfer	part signam	ng	Individually through the Electronic Bookshop: 22 CHF
1	E 4506	F 4505	S 4507	20 CHF	individually inrough the Electronic Bookshop. 22 CIII
Q.707 (11/88)	Testin	g and mair	ntenance		<b>Q.724 Amendment 1 (03/93)</b> Amendment 1 to ITU-T Q.724 (1988)
Individually t	hrough th	e Electronic	Bookshop:	20 CHF	0.7444400 77.1.1
•			-		Q.724 (11/88) Telephone user part signalling procedures
<b>Q.708 (03/99)</b> internationa					Individually through the Electronic Bookshop: 34 CHF
	E 16499	F 16500	S 16501	12 CHF	Q.725 (03/93) Signalling performance in the
Q.709 (03/93)	Hypot	hetical sign	nalling refere	ence	telephone application
connection					8pp E 4719 F 4718 S 4720 11 CHF
14pp	E 4404	F 4403	S 4405	11 CHF	IGD).
Q.710 (11/88)	Simpl	ified MTP	version for s	mall	ISDN supplementary services
systems	·······································				Q.730 (12/99) ISDN user part supplementary
Individually t	hrough th	e Electronic	Bookshop:	20 CHF	services
~. <b>11</b> .			/a a a a		44pp E 17815 F 17816 S 17817 22 CHF
Signalling co	nnectio	n control	part (SCCP <sub>)</sub>	<b>'</b> )	0.701.6
<b>Q.711 (03/01)</b> Functional description of the signalling connection control part					Q.731 Stage 3 description for number identification supplementary services using
	E 20733	F 20734	S 20735	22 CHF	Signalling System No. 7
0.513 (05/06)	D (* '	1.0		11.	<b>Q.731.1 (07/96)</b> Direct-dialling-In (DDI)
Q.712 (07/96) connection				gnalling	12pp E 9631 F 9632 S 9633 12 CHF
16pp	E 10724	F 10725	S 10726	12 CHF	Q.731.3 (03/93) Calling line identification presentation (CLIP)
Q.713 (03/01) formats and		lling conne	ection control	part	13pp E 4410 F 4409 S 4411 20 CHF
	E 20870	F 20871	S 20872	22 CHF	
Q.714 (05/01)			ection control		Q.731.4 (03/93) Calling line identification restriction (CLIR)
procedures	~ -8	8		F **	4pp E 4410 F 4409 S 4411 20 CHF
••	E 21636	F 21637	S 21638	73 CHF	Q.731.5 (03/93) Connected line identification presentation (COLP)
Q.715 (04/02) guide	Signal	lling conne	ection control	part user	16pp E 4410 F 4409 S 4411 20 CHF
61pp	E 22909	F 22910	S 22911	29 CHF	Q.731.6 (03/93) Connected line identification restriction (COLR)
Q.716 (03/93)			m No. 7 – Sig performance		6pp E 4410 F 4409 S 4411 20 CHF
	E 4560	F 4559	S 4561	11 CHF	Q.731.7 (06/97) Malicious call identification (MCID)
Telephone us	ser nart	(TUP)			12pp E 12132 F 12133 S 12134 12 CHF
- cropirone m	J. Part	(101)			O 721 9 (02/02) Cark addressing (CUD)
Q.721 (11/88) Functional description of the Signalling System No. 7 Telephone User Part (TUP)				at (TI ID)	Q.731.8 (02/92) Sub-addressing (SUB)
	•	•		1	Published with ITU-T Q.731.1.
Individually i	nrough th	e Electronic	: Bookshop:	20 CHF	4pp E 2612 F 2642 S 2673 11 CHF

ITU-T 02/03 - Series Q 105

*O.732 Stage 3 description for call offering* supplementary services using Signalling System No. 7 **Q.732.2-5 (12/99)** Call diversion services Call diversion Recommendation groups four services the stage 3 descriptions of which are similar: Q.732.2 – Call Forwarding Busy (CFB) Q.732.3 – Call Forwarding No Reply (CFNR) Q.732.4 – Call Forwarding Unconditional (CFU) Q.732.5 - Call Deflection (CD). 40pp E 17877 F 17878 S 17879 22 CHF Q.732.2-5 Amendment 1 (07/01) Stage 3 description for call offering supplementary services using Signalling System No. 7: Call diversion services E 21564 F 21565 S 21566 9 CHF Q.732.7 (07/96) Explicit Call Transfer E 10651 F 10652 28pp S 10653 17 CHF Q.733 Stage 3 description for call completion supplementary services using Signalling System No. 7 **Q.733.1 (02/92)** Call waiting (CW) 9pp E 2614 F 2644 S 2675 11 CHF Q.733.2 (03/93) Call hold (HOLD) Published with ITU-T Q.733.4. E 4446 F 4445 S 4447 11 CHF 7pp Q.733.3 (06/97) Completion of calls to busy subscriber (CCBS) 40pp E 12355 F 12356 S 12357 22 CHF Q.733.3 Amendment 1 (07/01) Stage 3 description for call completion supplementary services using Signalling System No. 7: Completion of calls to busy subscriber (CCBS) E 21770 F 21771 S 21772 9 CHF 9pp Q.733.4 (03/93) Terminal portability (TP) Published with ITU-T Q.733.2. E 4446 F 4445 S 4447 11 CHF Q.733.5 (12/99) Completion of calls on no reply E 18027 F 18028 S 18029 22 CHF 40pp O.734 Stage 3 description for multiparty supplementary services using Signalling System No. 7 **Q.734.1 (03/93)** Conference calling Published with ITU-T Q.734.2. Covering note, June 1999: Information note E 4449 F 4448 S 4450 15 CHF

0.735 Stage 3 description for community of interest supplementary services using Signalling System No. 7 **Q.735.1 (03/93)** Closed user group (CUG) E 4536 F 4535 29 CHF Q.735.3 (03/93) Multi-level precedence and preemption F 4535 S 4537 29 CHF 44pp E 4536 **O.735.6 (07/96)** Global Virtual Network Service (GVNS) 24pp E 10691 F 10692 S 10693 17 CHF Q.736 Stage 3 description for charging supplementary services using Signalling System No. 7 Q.736.1 (10/95) International Telecommunication Charge Card (ITCC) 20pp E 6760 F 6761 S 6762 17 CHF **Q.736.3 (10/95)** Reverse charging (REV) 36pp E 6691 F 6692 S 6693 20 CHF Q.737 Stage 3 description for additional information transfer supplementary services using Signalling System No. 7 Q.737.1 (06/97) User-to-user signalling (UUS) E 12349 F 12350 S 12351 40pp 22 CHF Data user part Q.741 (11/88) Signalling System No. 7 – Data user This Recommendation is published under alias number X.61 Signalling System No. 7 management Q.750 (06/97) Overview of Signalling System No. 7 management 17 CHF 24pp E 12220 F 12221 S 12222 Q.751.1 (10/95) Network element management information model for the Message Transfer Part (MTP) E 7117 F 7118 S 7119 61 CHF 152pp Q.751.2 (06/97) Network element management information model for the Signalling Connection Control Part E 12385 F 12386 S 12387 44 CHF 100pp Q.751.3 (09/97) Network element information model for MTP accounting

E 12559

32pp

F 12560

S 12561

17 CHF

F 10640

S 10641

17 CHF

**Q.734.2 (07/96)** Three-party service

E 10639

22pp

20pp

106

Q.751.4 (05/98) Network element information model for SCCP accounting and accounting verification

20pp E 13769 F 13770 S 13771 17 CHF

**Q.752 (06/97)** Monitoring and measurements for Signalling System No. 7 networks

56pp E 11942 F 11943 S 11944 29 CHF

**Q.753 (06/97)** Signalling System No. 7 management functions MRVT, SRVT and CVT and definition of the OMASE-user

64pp E 11979 F 11980 S 11981 29 CHF

**Q.754 (06/97)** Signalling System No. 7 management Application Service Element (ASE) definitions

48pp E 11991 F 11992 S 11993 22 CHF

Q.755 (03/93) Signalling System No. 7 protocol tests

10pp E 4638 F 4637 S 4639 11 CHF

Q.755.1 (05/98) MTP Protocol Tester

44pp E 13724 F 13725 S 13726 22 CHF

Q.755.2 (09/97) Transaction capabilities test responder

24pp E 12496 F 12497 S 12498 17 CHF

**Q.756 (06/97)** Guidebook to Operations, Maintenance and Administration Part (OMAP)

16pp E 11935 F 11936 S 11937 12 CHF

ISDN user part

**Q.761 (12/99)** Signalling System No. 7 – ISDN User Part functional description

20pp E 17663 F 17664 S 17665 17 CHF

**Q.761 Amendment 1 (07/01)** Specifications of Signalling System No. 7 – ISDN user part functional description

8pp E 21567 F 21568 S 21569 9 CHF

**Q.761 Amendment 2 (12/02)** Support for the international emergency preference scheme

To be published...

**Q.762 (12/99)** Signalling System No. 7 – ISDN User Part general functions of messages and signals

28pp E 19117 F 19118 S 19119 17 CHF

**Q.762 Addendum 1 (06/00)** Addendum 1 4pp E 19721 F 19722 S 19723 9 CHF

**Q.762 Amendment 1 (12/02)** Support for the international emergency preference scheme To be published...

**Q.763 (12/99)** Signalling System No. 7 – ISDN User Part formats and codes

134pp E 19698 F 19699 S 19700 55 CHF

Q.763 Amendment 1 (03/01) Analytical method to calculate short-term visibility and interference statistics for non-geostationary satellite orbit satellites as seen from a point on the Earth's surface

12pp E 20797 F 20798 S 20799 12 CHF

**Q.763 Amendment 2 (12/02)** Support for the international emergency preference scheme To be published...

Q.763 Corrigendum 1 (07/01)

**Q.764 (12/99)** Signalling System No. 7 – ISDN User Part signalling procedures

108pp E 19701 F 19702 S 19703 44 CHF

**Q.764 Amendment 1 (07/01)** Amendment 1

16pp E 21721 F 21722 S 21723 12 CHF

**Q.764 Amendment 2 (12/02)** Support for the international emergency preference scheme To be published...

Q.765bis (12/99) Signalling system No. 7 – Application Transport Mechanism: Test Suite Structure and Test Purposes (TSS & TP)

32pp E 18114 F 18115 S 18116 17 CHF

**Q.765 (06/00)** Signalling system No. 7 – Application transport mechanism

40pp E 19611 F 19612 S 19613 22 CHF

Q.765.1 (05/98) Signalling System No. 7 – Application transport mechanism: Support of VPN applications with PSS1 information flows

56pp E 14421 F 14422 S 14423 29 CHF

**Q.765.1bis (12/99)** Abstract test suite for the APM support of VPN applications

This Recommendation includes an electronic attachment containing the ATS for ISUP'97 for APM support of VPN in machine processable form and in pdf form

28pp E 19580 F 19581 S 19582 67 CHF

Q.765.1bis Amendment 1 (12/00) Amendment: Abstract test suite for the APM support of VPN applications

16pp E 21507 12 CHF

Q.765.4 (06/00) Managed objects for diagnostic Test specification information of public switched telephone network connected V-series modem DCE's Q.780 (10/95) Signalling System No. 7 test E 19934 F 19935 S 19936 22 CHF 44pp specification - General description Q.765.5 (06/00) Managed objects for diagnostic 16pp E 6914 F 6915 S 6916 15 CHF information of public switched telephone network connected V-series modem DCE's Q.781 (04/02) MTP level 2 test specification E 20064 F 20065 S 20066 17 CHF 28pp 110pp E 22514 F 22515 S 22516 44 CHF Q.765.5 Amendment 1 (07/01) Bearer Independent Call Control Capability Set 2 Q.782 (04/02) MTP level 3 test specification E 21818 F 21819 S 21820 12 CHF 20pp F 22585 S 22586 61 CHF 152pp E 22584 Q.766 (03/93) Performance objectives in the Q.783 (11/88) TUP test specification integrated services digital network application E 4853 F 4852 S 4854 8 CHF 4pp *Individually through the Electronic Bookshop:* 39 CHF Q.767 (02/91) Application of the ISDN user part of CCITT signalling system No. 7 for international Q.784 ISUP basic call test specification ISDN interconnections 271pp E 2334 F 2312 S 2356 65 CHF Q.784 Annex A (03/93) TTCN version of Recommendation Q.784 Q.767 Amendment 1 (12/03) Support for the 47 CHF 135pp E 5165 F 5223 S 5258 international emergency preference scheme To be published... Q.784.1 (07/96) Validation and compatibility for ISUP'92 and Q.767 protocols Q.768 (10/95) Signalling interface between an international switching centre and an ISDN satellite E 10592 F 10593 S 10594 55 CHF 144pp subnetwork 29 CHF 52pp E 7006 F 7007 S 7008 Q.784.1 Corrigendum 1 (12/99) **Q.769.1 (12/99)** Signalling system No. 7 – ISDN user part enhancements for the support of number Q.784.2 (06/97) Abstract test suite for ISUP'92 basic call control procedures portability 20pp E 17788 F 17789 S 17787 17 CHF This Recommendation includes one diskette containing Annex D ISUP'92 ATS for basic call in graphical and in machine processable form. Transaction capabilities application part 96pp E 13023 F 13029 S 13030 79 CHF Q.771 (06/97) Functional description of transaction capabilities **Q.784.3 (12/99)** ISUP '97 basic call control 36pp E 12403 F 12404 S 12405 22 CHF procedures – Test suite structure and test purposes (TSS & TP) Q.772 (06/97) Transaction capabilities information element definitions This Recommendation includes an electronic attachment containing the ATS for ISUP'97 basic call control 12pp E 12321 F 12322 S 12323 12 CHF procedures in machine processable form and in pdf form Q.773 (06/97) Transaction capabilities formats and E 19534 F 19535 S 19536 89 CHF 92pp encoding E 12406 F 12407 S 12408 22 CHF 36pp **Q.784.3 Amendment 1 (12/00)** Amendment 1 Q.774 (06/97) Transaction capabilities procedures 17 CHF 28pp E 21515 E 12388 F 12389 S 12390 29 CHF 64pp

Q.785 (09/91) ISUP protocol test specification for

F 2324

S 2368

21 CHF

supplementary services

49pp

E 2346

E 11938

capabilities

64pp

Q.775 (06/97) Guidelines for using transaction

F 11939

S 11940

29 CHF

Q.785.2 (03/99) ISUP'97 supplementary services – Test suite structure and test purposes (TSS & TP)

This Recommendation includes one CD-ROM containing the ISUP'97 ATS for supplementary services in machine processable form and in graphical form.

332pp E 17285 F 17286 S 17287 249 CHF

**Q.785.2 Amendment 1 (12/00)** Amendment 1: New Appendix I – Additional test configuration for ISUP'97 supplementary services

E 21588 F 21589 S 21590 62 CHF

**Q.785.2 Erratum 1 (02/02)** Erratum to Recommendation ITU-T Q.785.2 (03/1999)

This Erratum includes an electronic attachment containing the ISUP'97 ATS for Supplementary Services version 12/1999

Q.786 (03/93) SCCP test specification

50pp E 4296 F 4295 S 4297 24 CHF

**Q.787 (09/97)** Transaction Capabilities (TC) test specification

320pp E 13116 F 13117 S 13118 124 CHF

Q.788 (06/97) User-network-interface to user-network-interface compatibility test specifications for ISDN, non-ISDN and undetermined accesses interworking over international ISUP

240pp E 12245 F 12246 S 12247 96 CHF

Q.795 (11/88) Withdrawn (03/93)

Operations, Maintenance and Administration Part (OMAP)

The content of this Recommendation is now covered by ITU-T Q.75x series

*Individually through the Electronic Bookshop:* 20 CHF

Q3 interface

**Q.811 (06/97)** Lower layer protocol profiles for the Q3 and X interfaces

56pp E 11958 F 11959 S 11960 29 CHF

**Q.812 (06/97)** Upper layer protocol profiles for the Q3 and X interfaces

24pp E 11961 F 11962 S 11963 17 CHF

**Q.812 Amendment 1 (03/99)** Additional X interface protocols for the service management layer (SML)

8pp E 15892 F 15893 S 15894 9 CHF

**Q.812 Amendment 2 (02/00)** Protocol profile for electronic communications interactive agent

To be published...

**Q.812 Appendix I (03/99)** Guidance on using allomorphic management

24pp E 15757 F 15758 S 15759 17 CHF

Q.813 (06/98) Security Transformations Application Service Element for Remote Operations Service Element (STASE-ROSE)

68pp E 14465 F 14466 S 14467 34 CHF

Q.814 (02/00) Specification of an electronic data interchange interactive agent

24pp E 19182 F 19183 S 19184 17 CHF

**Q.815 (02/00)** Specification of a security model for whole message protection

20pp E 19191 F 19192 S 19193 17 CHF

Q.816 (01/01) CORBA-based TMN services

80pp E 20532 F 20533 S 20534 29 CHF

Q.816 Amendment 1 (08/01) OMG services profile

16pp E 21570 F 21571 S 21572 12 CHF

**Q.816 Amendment 2 (05/02)** User guide for local name resolution

9pp E 22455 F 22456 S 22457 9 CHF

Q.816 Corrigendum 1 (08/01)

Q3 interface

Q3 interface

Q.816 Corrigendum 2 (08/02)

Specifications of Signalling System No. 7

Q3 interface

**Q.816.1 (08/01)** CORBA based TMN services: Extensions to support coarse-grained interfaces

36pp E 21895 F 21896 S 21897 17 CHF

**Q.817 (01/01)** TMN PKI – Digital certificates and certificate revocation lists profiles

18pp E 20443 F 20444 S 20445 12 CHF

**Q.821 (02/00)** Stage 2 and Stage 3 description for the Q3 interface – Alarm Surveillance

84pp E 20084 F 20085 S 20086 34 CHF

**Q.821.1 (09/01)** CORBA-based TMN alarm surveillance service

100pp E 21736 F 21737 S 21738 39 CHF

**Q.822 (04/94)** Stage 1, stage 2 and stage 3 Q.826 (02/00) Stage 2 and Stage 3 Functional description for the Q3 interface - Performance Specification of Call Routing Information management Management on Operation System/Network Element (OS/NE) Interface S 5318 47pp E 5308 F 5295 24 CHF E 19915 F 19916 S 19917 144pp 55 CHF Q.822.1 (10/01) CORBA-based TMN performance management service Q.831 (10/97) Fault and performance management of V5 interface environments and associated customer E 22224 F 22225 S 22226 22 CHF 52pp profiles E 12478 F 12479 S 12480 **Q.823 (07/96)** Stage 2 and Stage 3 functional 52pp 29 CHF specifications for traffic management Q.831 Corrigendum 1 (03/01) 112pp E 10522 F 10523 S 10524 44 CHF Q.831.1 (02/00) Access Management for V5 Q.823.1 (10/97) Management Conformance Statement Proformas 56pp E 19801 F 19802 S 19803 29 CHF E 12525 F 12526 292pp S 12527 96 CHF **Q.832.1 (06/98)** VB5.1 Management E 14146 F 14147 S 14148 29 CHF Q.824 Stages 2 and 3 description for the Q3 interface - Customer administration Q.832.1 Corrigendum 1 (03/01) **Q.824.0 (10/95)** Common information **Q.832.2 (03/99)** VB5.2 Management 52pp E 6763 F 6764 S 6765 29 CHF 40pp E 15898 F 15899 S 15900 22 CHF Q.824.1 (10/95) Integrated Services Digital Network Q.832.3 (01/01) Broadband access coordination (ISDN) basic and primary rate access S 6784 60pp E 20717 F 20718 S 20719 29 CHF E 6782 F 6783 72pp 34 CHF Q.824.2 (10/95) Integrated Services Digital Network Q.833.1 (01/01) Asymmetric digital subscriber line (ADSL) – Network element management: CMIP (ISDN) supplementary services model E 6704 F 6705 S 6706 15 CHF 32pp E 21404 F 21405 S 21406 22 CHF 52pp Q.824.3 (10/95) Integrated Services Digital Network Q.834.1 (04/01) ATM-PON requirements and (ISDN) optional user facilities managed entities for the network element view F 6755 16pp E 6754 S 6756 12 CHF 144pp E 21656 F 21657 S 21658 55 CHF Q.824.4 (10/95) Integrated Services Digital Network Q.834.2 (04/01) ATM PON requirements and (ISDN) teleservices managed entities for the network view E 6515 F 6516 S 6517 11 CHF 12pp E 20714 F 20715 S 20716 29 CHF 58pp Q.824.5 (10/97) Configuration management of V5 interface environments and associated customer Q.834.3 (11/01) A UML description for management interface requirements for broadband Passive Optical profiles Networks 112pp E 12562 F 12563 S 12564 44 CHF S 22547 170pp E 22545 F 22546 73 CHF Q.824.5 Corrigendum 1 (02/00) Q.835 (03/99) Line and line circuit test management of ISDN and analogue customer accesses Q.824.6 (06/98) Broadband switch management E 16164 F 16166 S 16167 76pp 34 CHF F 14312 49 CHF 124pp E 14311 S 14313 Q.824.7 (02/00) Enhanced Broadband Switch Q.835 Corrigendum 1 (03/01) F 19876 S 19877 17 CHF Corrigendum 1 to Recommendation Q.835 32pp E 19875 Q.825 (06/98) Specification of TMN applications at Q.836.1 (02/00) SSF management information the Q3 interface: Call detail recording model S 19168 29 CHF 88pp E 14214 F 14215 S 14216 39 CHF 64pp E 19162 F 19166

110

ITU-T 02/03 - Series Q

## Digital subscriber Signalling System No. 1

#### General

**Q.850 (05/98)** Usage of cause and location in the Digital Subscriber Signalling System No. 1 and the Signalling System No. 7 ISDN User Part

32pp E 14218 F 14219 S 14220 17 CHF

**Q.850 Addendum 1 (06/00)** Addendum 1

4pp E 19704 F 19705 S 19706 9 CHF

## General

Q.850 Amendment 1 (07/01) Usage of cause and location in the Digital Subscriber Signalling System No. 1 (DSS1) and the Signalling System No. 7 ISDN user part (ISUP)

8pp E 21579 F 21580 S 21581 9 CHF

## General

Q.860 (06/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

36pp E 20009 F 20010 S 20011 17 CHF

## Data link layer

Q.920 (03/93) ISDN user-network interface data link layer – General aspects

This Recommendation is also included but not published in I series under alias number I.440

20pp E 4353 F 4352 S 4354 15 CHF

Q.920 Amendment 1 (06/00)

10pp E 19680 F 19681 S 19682 9 CHF

Q.921bis (03/93) Abstract test suite for LAPD conformance testing

This Recommendation includes 5 diskettes containing postscript files of ATS for testing conformance of basic rate user side equipment to Rec. Q.921.

10pp E 10162 F 10163 S 10164 111 CHF

**Q.921 (09/97)** ISDN user-network interface – Data link layer specification

This Recommendation is also included but not published in I series under alias number I.441.

268pp E 13327 F 13328 S 13329 96 CHF

Q.921 Amendment 1 (06/00)

16pp E 19524 F 19525 S 19526 12 CHF

**Q.922 (02/92)** ISDN data link layer specification for frame mode bearer services

109pp E 2808 F 2770 S 2843 38 CHF

Q.923 (02/95) Specification of a synchronization and coordination function for the provision of the OSI connection-mode network service in an ISDN environment

28pp E 6033 F 6032 S 6034 15 CHF

## Network layer

**Q.930 (03/93)** ISDN user-network interface layer 3 – General aspects

This Recommendation is also included but not published in I series under alias number I.450

3pp E 4997 F 4996 S 4998 8 CHF

**Q.931 (05/98)** ISDN user-network interface layer 3 specification for basic call control

This Recommendation is also included but not published in I series under alias number I.451

344pp E 15605 F 15606 S 15607 124 CHF

**Q.931 Amendment 1 (12/02)** Extensions for the support of digital multiplexing equipment

To be published...

Q.932 (05/98) Digital subscriber signalling system
 No. 1 – Generic procedures for the control of ISDN supplementary services

This Recommendation is also included but not published in I series under alias number I.452.

124pp E 14512 F 14513 S 14514 49 CHF

## Q.932 Amendment 1 (06/00)

20pp E 19590 F 19591 S 19592 17 CHF

Q.933bis (10/95) Abstract test suite – Signalling specification for frame mode basic call control conformance testing for permanent virtual connections (PVCs)

This Recommendation includes one diskette containing Abstract test suites Section II corresponding to additional procedures for PVCs as per ITU-T O.933 Annex A.

8pp E 13374 F 13377 S 13378 49 CHF

## Q3 interface

## Q3 interface

Q.933 (02/03) Digital Subscriber Signalling System No. 1 (DSS 1) – Signalling specifications for frame mode switched and permanent virtual connection control and status monitoring

To be published...

O		0	•		- , , , , , , , , , , , , , , , , , , ,					
Q.939 (03/93) Typical DSS 1 service indicator codings for ISDN telecommunications services						rts 1, 2 and 8	_		11 CHE	
49pp	E 5017	F 5016	S 5018	24 CHF	5pp	E 2613	F 2643	S 2674	11 CHF	
User-netwo					<b>Q.952 (03/93)</b> Stage 3 description for call offering supplementary services using DSS 1 – Diversion supplementary services					
Q.940 (11/8		user-netwo		protocol			•		20 CHE	
_		e Electronic		20 CHF	66pp	E 5092	F 5091	S 5093	29 CHF	
Q.941 (03/9		user-netwo	-		<b>Q.952.7 (06/97)</b> Stage 3 description for call offering supplementary services using DSS 1 – Explicit Call Transfer (ECT)					
>pp	L 4430	1 4437	5 4457	II CIII	52pp	E 11967	F 11968	S 11969	29 CHF	
Stage 3 des using DSS 2  Q.950 (06/0	l (0) Suppl	ementary s	ervices prote		Q.953 ISDN stage 3 description for call completion supplementary services using DSS 1					
	•	l principles F 19597		17 CHF	<b>Q.953.1 (02/92)</b> Call waiting					
28pp	E 19390	Г 19397	3 19398	17 СПГ	11pp	E 2616	F 2647	S 2678	11 CHF	
Q.951 Stag					ттрр	E 2010	Г 2047	3 20/8	пспг	
identification supplementary services using DSS 1					<b>Q.953.2 (03/93)</b> Call hold					
Q.951.1 (02	/ <b>92</b> ) Dire	ect-dialling	-in (DDI)		17pp	E 4934	F 4933	S 4935	15 CHF	
<i>Q.951 part</i> 4pp	E 2613	published to F 2643	ogether S 2674	11 CHF	<b>Q.953.3 (06/97)</b> Completion of Calls to Busy Subscribers (CCBS)					
Q.951.2 (02	/ <b>92</b> ) Mul	tiple subsc	riber numbe	r (MSN)	104pp	E 12409	F 12410	S 12411	44 CHF	
~ .		published to	_		0.0=0.4.44	0.05		1 111 (TTP)		
5pp	E 2613	F 2643	S 2674	11 CHF	Q.953.4 (1	<b>0/95)</b> Terr	nınal Porta	ibility (TP)		
Q.951.3 (03 presentati		ing line ide	entification		12pp	E 6904	F 6906	S 6905	12 CHF	
Q.951 parts 3-6 published together					Q.953.5 (12/99) Call Completion on No Reply					
13pp	E 5026	F 5025	S 5027	20 CHF	(CCNR)					
Q.951.4 (03		ing line ide		restriction	This Recommendation includes one diskette containing the SDL process diagrams of DSS1 CCNR in machine processable form and in graphical form.					
6pp	E 5026	F 5025	S 5027	20 CHF	88pp	E 17711	F 17712	S 17713	79 CHF	
Q.951.5 (03		nected line	identification	on						
presentati		hed together			Q.954 Stage 3 description for multiparty supplementary services using DSS 1					
2.931 part 14pp	E 5026	F 5025	S 5027	20 CHF	supplem	ieniary ser	vices using	g Dss 1		
Q.951.6 (03					Q.954.1 (0	<b>3/93)</b> Con	ference cal	lling		
restriction					Covering	note, June 19	999: Informa	ation note		
~ .	-	hed together		20 CHE	43pp	E 5065	F 5064	S 5066	24 CHF	
6рр	E 5026	F 5025	S 5027	20 CHF						
<b>Q.951.7 (06</b> (MCID)	5/ <b>97</b> ) Mal	icious Call	Identification	on	Q.954.2 (1	<b>0/95)</b> Thre	ee-party (3)	PTY)		
16pp	E 11919	F 11920	S 11921	12 CHF	36pp	E 7120	F 7121	S 7122	22 CHF	

**Q.951.8 (02/92)** Sub-addressing (SUB)

Digital subscriber Signalling System No. 1

112

ITU-T 02/03 - Series Q

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

**Q.955.1 (02/92)** Stage 3 description for community of interest supplementary services using DSS 1: Closed user group

21pp E 2619 F 2650 S 2681 17 CHF

**Q.955.3 (03/93)** Multi-level precedence and preemption (MLPP)

59pp E 5080 F 5079 S 5081 24 CHF

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

Q.956.2 (10/95) Advice of charge

52pp E 6688 F 6689 S 6690 25 CHF

**Q.956.3 (10/95)** Reverse charging

36pp E 6506 F 6507 S 6508 20 CHF

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

Q.957.1 (07/96) User-to-User Signalling (UUS)

36pp E 10730 F 10731 S 10732 22 CHF

#### **Public Land Mobile Network**

General

**Q.1000 (11/88)** Structure of the Q.1000-Series Recommendations for public land mobile networks

*Individually through the Electronic Bookshop:* 20 CHF

Q.1001 (11/88) General aspects of public land mobile networks

*Individually through the Electronic Bookshop:* 20 CHF

**Q.1002 (11/88)** Network functions

Individually through the Electronic Bookshop: 20 CHF

Q.1003 (11/88) Location registration procedures

*Individually through the Electronic Bookshop:* 20 CHF

Q.1004 (11/88) Location register restoration procedures

*Individually through the Electronic Bookshop:* 20 CHF

Q.1005 (11/88) Handover procedures

*Individually through the Electronic Bookshop:* 22 CHF

## Interworking with ISDN and PSTN

Q.1031 (11/88) General signalling requirements on interworking between the ISDN or PSTN and the PLMN

*Individually through the Electronic Bookshop:* 20 CHF

Q.1032 (11/88) Signalling requirements relating to routing of calls to mobile subscribers

*Individually through the Electronic Bookshop:* 20 CHF

Mobile Application Part

## Q.1051 (11/88) Withdrawn (03/93)

Mobile application Part

This Recommendation was made for second generation of mobile systems. For this generation, three specifications have been developed by regional standards organizations. These implementations were complying with the philosophy of intentions of the Q.1000-Series of Recommendations, but they were modified and enhanced to include new functions and to handle regional network dependant features. These regional specifications supersede ITU-T Q.1051 (1988)

*Individually through the Electronic Bookshop:* 20 CHF

## Digital PLMN user-network interfaces

**Q.1061 (11/88)** General aspects and principles relating to digital PLMN access signalling reference points

*Individually through the Electronic Bookshop:* 20 CHF

**Q.1062 (11/88)** Digital PLMN access signalling reference configurations

*Individually through the Electronic Bookshop:* 20 CHF

Q.1063 (11/88) Digital PLMN channel structures and access capabilities at the radio interface (Um reference point)

*Individually through the Electronic Bookshop:* 20 CHF

## Interworking with satellite mobile systems

Interworking with Standard-A INMARSAT system

**Q.1100 (03/93)** Structure of the Recommendations on the INMARSAT mobile satellite systems

2pp E 4075 F 4074 S 4076 8 CHF

Q.1101 (11/88) General requirements for the interworking of the terrestrial telephone network and INMARSAT Standard A system

*Individually through the Electronic Bookshop:* 20 CHF

Q.1102 (11/88) Interworking between Signalling Q.1204 (03/93) Intelligent network distributed System R2 and INMARSAT Standard A system functional plane architecture Individually through the Electronic Bookshop: E 4041 F 4040 S 4042 15 CHF 24pp Q.1103 (11/88) Interworking between Signalling Q.1205 (03/93) Intelligent network physical plane System No. 5 and INMARSAT Standard A system architecture Individually through the Electronic Bookshop: 8 CHF E 3859 F 3858 S 3860 6pp Interworking with Standard-B INMARSAT system Q.1208 (09/97) General aspects of the Intelligent Network Application protocol Q.1111 (03/93) Interfaces between the INMARSAT E 12800 F 12801 S 12802 9 CHF Standard B system and the international public switched telephone network/ISDN Q.1210 (10/95) Q.1210-series Intelligent network 22pp E 4461 F 4460 S 4462 15 CHF Recommendation structure 12pp E 6831 F 6832 S 6833 12 CHF Q.1112 (03/93) Procedures for interworking between INMARSAT Standard-B system and the Q.1211 (03/93) Introduction to intelligent network international public switched telephone capability set 1 network/ISDN 30pp E 3920 F 3919 S 3921 15 CHF E 4677 F 4676 S 4678 24 CHF 57pp Q.1213 (10/95) Global functional plane for Interworking with the INMARSAT aeronautical intelligent network CS-1 mobile-satellite system E 6986 S 6988 20 CHF 44pp F 6987 Q.1151 (03/93) Interfaces for interworking between the INMARSAT aeronautical mobile-satellite system Q.1214 (10/95) Distributed functional plane for and the international public switched telephone intelligent network CS-1 network/ISDN 312pp E 6941 F 6942 S 6943 99 CHF 20pp E 4356 F 4355 S 4357 15 CHF Q.1215 (10/95) Physical plane for intelligent network Q.1152 (03/93) Procedures for interworking between CS-1 INMARSAT aeronautical mobile satellite system E 6955 F 6956 S 6957 12 CHF 12pp and the international public switched telephone network/ISDN Q.1218 (10/95) Interface Recommendation for 55pp E 4464 F 4463 S 4465 24 CHF intelligent network CS-1 E 7045 F 7046 S 7047 310 CHF 432pp **Intelligent Network** Q.1218 Addendum 1 (09/97) Definition for two new Q.1200 (09/97) General series Intelligent Network contexts in the SDF data model Recommendation structure E 12830 F 12831 S 12832 9 CHF F 14315 S 14316 E 14314 12 CHF Q.1219 (04/94) Intelligent network user's guide for Q.1201/I.312 (10/92) Principles of intelligent capability set 1 network architecture 204pp E 5459 F 5458 S 5460 8 CHF This Recommendation is published with the double number Q.1201 and I.312 E 3246 F 3245 S 3247 20 CHF 37pp **Supplements to the Series Q.1210** Recommendations Q.1202/I.328 (09/97) Intelligent network – Service plane architecture Suppl. 1 (09/97) Intelligent network user's guide for This Recommendation is published with the double number Capability Set 1: Supplement for IN CS-1 O.1202 and I.328 E 13079 F 13080 S 13081 17 CHF 20pp 24pp E 12967 F 12968 S 12969 17 CHF **Intelligent Network** Q.1203/I.329 (09/97) Intelligent network – Global functional plane architecture Q.1220 (09/97) Q.1220-series Intelligent Network This Recommendation is published with the double number Capability Set 2 Recommendation structure O.1203 and I.329. For more details see I.329 E 15548 F 15549 S 15550 12 CHF E 12911 F 12912 S 12913 12 CHF 24pp 16pp

Q.1221 (09/97) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

44pp E 12803 F 12804 S 12805 22 CHF

Q.1222 (09/97) Service plane for Intelligent Network Capability Set 2

12pp E 12833 F 12834 S 12835 12 CHF

**Q.1223 (09/97)** Global functional plane for Intelligent Network Capability Set 2

108pp E 12782 F 12783 S 12784 44 CHF

**Q.1224 (09/97)** Distributed functional plane for intelligent network Capability Set 2

This Recommendation is published in three fascicles.
712pp E 13620 F 13621 S 13622 288 CHF

**Q.1225 (09/97)** Physical plane for Intelligent Network Capability Set 2

16pp E 12528 F 12529 S 12530 12 CHF

**Q.1228** (09/97) Interface Recommendation for intelligent network Capability Set 2

This Recommendation includes 3 diskettes containing Q.1228 SDL diagrams in SDT source format and in PDF format.

968pp E 14620 F 14621 S 14622 310 CHF

Q.1229 (03/99) Intelligent Network user's guide for capability Set 2

This Recommendation is published in 5 fascicles.

172pp E 17424 F 17425 S 17426 73 CHF

**Q.1231 (12/99)** Introduction to Intelligent Network Capability Set 3

E 19224 F 19225 S 19226 17 CHF

Q.1236 (12/99) Intelligent Network Capability Set 3
 Management Information Model Requirements and Methodology

56pp E 18102 F 18103 S 18104 29 CHF

Q.1237 (06/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

96pp E 19918 F 19919 S 19920 39 CHF

Q.1238 Interface Recommendation for intelligent network capability set 3

**Q.1238.1 (06/00)** Common aspects

This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 common aspects

84pp E 19878 F 19879 S 19880 89 CHI

**Q.1238.2 (06/00)** Interface Recommendation for intelligent network capability set 3 : SCF-SSF interface

This Recommendation includes an electronic attachment containing the ASN.1 definitions and the SDL diagrams in machine processable forms and in pdf form for SCF-SFF interface

480pp E 20698 F 20699 S 20700 247 CHF

**Q.1238.3 (06/00)** SCF-SRF interface

This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-SRF interface

84pp E 20315 F 20316 S 20317 89 CHF

**Q.1238.4 (06/00)** SCF-SDF interface

This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-SDF interface

52pp E 20309 F 20310 S 20311 79 CHF

**Q.1238.5** (06/00) SDF-SDF interface

This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SDF-SDF interface

72pp E 20295 F 20297 S 20303 84 CHF

**Q.1238.6 (06/00)** Interface Recommendation for intelligent network capability set 3: SCF-SCF interface

This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-SCF interface

84pp E 20727 F 20728 S 20729 9 CHF

**Q.1238.7 (06/00)** Interface Recommendation for intelligent network capability set 3 : SCF-CUSF interface

This Recommendation includes an electronic attachment containing the ASN.1 definitions for the IN CS-3 SCF-CUSF interface

66pp E 20322 F 20323 S 20324 79 CHF

**Q.1241 (07/01)** Introduction to Intelligent Network Capability Set 4

24pp E 21704 F 21705 S 21706 17 CHF

**Q.1244 (07/01)** Distributed functional plane for Intelligent Network Capability Set 4

72pp E 22242 F 22243 S 22244 29 CHF

Q.1248.1 (07/01) Interface Recommendation for Intelligent Network Capability Set 4: Common aspects

88pp E 22054 F 22055 S 22056 89 CHF

**Q.1248.2 (07/01)** Interface recommendation for Intelligent Network Capability Set 4: SCF-SSF Interface

144pp E 22376 F 22377 S 22378 95 CHF

Q.1248.3 (07/01) Interface recommendation for Intelligent Network Capability Set 4: Interface Recommendation for Intelligent Network Capability Set 4: SCF-SRF interface

92pp E 21955 F 21956 S 21957 89 CHF

Q.1248.4 (07/01) Interface Recommendation for Intelligent Network Capability Set 4: SCF-SDF interface

60pp E 22093 F 22094 S 22095 79 CHF

Q.1248.5 (07/01) Interface Recommendation for Intelligent Network Capability Set 4: SDF-SDF interface

76pp E 21758 F 21759 S 21760 84 CHF

Q.1248.6 (07/01) Interface recommendation for Intelligent Network Capability Set 4: Interface Recommendation for Intelligent Network Capability Set 4: SCF-SCF interface

92pp E 21651 F 21652 S 21653 89 CHF

Q.1248.7 (07/01) Interface Recommendation for Intelligent Network capability set 4: SCF-CUSF Interface

65pp E 21488 F 21489 S 21490 79 CHF

Q.1290 (05/98) Glossary of terms used in the definition of intelligent networks

24pp E 13772 F 13773 S 13774 17 CHF

**Q.1300 (10/95)** Telecommunication applications for switches and computers (TASC) – General overview

16pp E 6891 F 6892 S 6893 12 CHF

**Q.1301 (10/95)** Telecommunication applications for switches and computers (TASC) – TASC Architecture

28pp E 6958 F 6959 S 6960 17 CHF

**Q.1302 (10/95)** Telecommunication applications for switches and computers (TASC) – TASC functional services

96pp E 6800 F 6803 S 6804 39 CHF

Q.1303 (10/95) Telecommunication applications for switches and computers (TASC) – TASC Management: Architecture, methodology and requirements

20pp E 6851 F 6852 S 6853 17 CHF

Q.1400 (03/93) Architecture framework for the development of signalling and OA&M protocols using OSI concepts

49pp E 6132 F 6131 S 6133 8 CHF

Q.1400 Addendum 1 (02/95) Architecture framework for the development of signalling and OAM protocols using OSI concepts

5pp E 4578 F 4577 S 4579 20 CHF

**Q.1521 (06/00)** Requirements on underlying networks and signalling protocols to support UPT

40pp E 19605 F 19606 S 19607 22 CHF

Q.1531 (06/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

28pp E 19967 F 19968 S 19969 17 CHF

Q.1541 (05/98) UPT stage 2 for Service Set 1 on IN CS1 – Procedures for universal personal telecommunication: Functional modelling and information flows

64pp E 14430 F 14431 S 14432 29 CHF

Q.1542 (06/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

95pp E 20067 F 20068 S 20069 39 CHF

Q.1551 (06/97) Application of Intelligent Network Application Protocols (INAP) CS1 for UPT Service Set 1

152pp E 12317 F 12318 S 12319 61 CHF

**Q.1600 (09/97)** Signalling system No. 7 – Interaction between ISUP and INAP

56pp E 12756 F 12757 S 12758 29 CHF

**Q.1600bis (12/99)** Signalling system No. 7 – Interaction between ISDN user part ISUP'97 and INAP CS1: Test suite structure and test purposes (TSS & TP)

This Recommendation includes an electronic attachment containing the ATS in machine processable form and in pdf form for ISUP'97/INAP CS-1 interaction

52pp E 19573 F 19574 S 19575 79 CHF

Q.1600bis Amendment 1 (12/00) Amendment 1

22pp E 21504 17 CHF

Q.1601 (12/99) Signalling system No. 7 – Interaction between N-ISDN and INAP CS2

56pp E 18943 F 18944 S 18945 29 CHF

Signalling requirements and protocols for IMT-2000

**Q.1701 (03/99)** Framework for IMT-2000 networks

24pp E 16183 F 16184 S 16185 17 CHF

**Q.1702 (06/02)** Long-term vision of network aspects for systems beyond IMT-2000

16pp E 22331 F 22332 S 22333 12 CHF

## Signalling requirements and protocols for IMT-2000

Q.1711 (03/99) Network functional model for IMT-2000

64pp E 16332 F 16333 S 16335 29 CHF

## **Intelligent Network**

Q.1721 (06/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

180pp E 18871 F 18872 S 18873 73 CHF

Q.1731 (06/00) Radio-technology independent requirements for IMT-2000 layer 2 radio interface

28pp E 18309 F 18310 S 18311 17 CHF

**Q.1741.1 (04/02)** IMT-2000 references to release 1999 of GSM evolved UMTS core network with UTRAN access network

156pp E 22674 F 22675 S 22676 61 CHF

Q.1741.2 (12/02) IMT-2000 References to ANSI-41 evolved Core Network with cdma2000 Access Network

To be published...

Q.1742.1 (12/02) IMT-2000 References to ANSI-41 evolved Core Network with cdma2000 Access Network

To be published...

**Q.1751 (06/00)** Internetwork signalling requirements for IMT-2000 capability set 1

44pp E 18777 F 18778 S 18779 22 CHF

Q.1901 (06/00) Bearer independent call control protocol

84pp E 19940 F 19941 S 19942 39 CHF

Q.1901 Corrigendum 1 (04/02)

## Specifications of signalling related to Bearer Independent Call Control (BICC)

**Q.1902.1 (07/01)** Bearer Independent Call Control protocol (Capability Set 2): Functional description

Available as a prepublished version

32pp E 21561 F 21562 S 21563 17 CHF

**Q.1902.1 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

Q.1902.2 (07/01) Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No. 7 ISDN user part: General functions of messages and parameters

40pp E 21806 F 21807 S 21808 22 CHF

**Q.1902.2 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

Q.1902.3 (07/01) Bearer independent call control protocol (Capability Set 2) and Signalling System No. 7 ISDN user part: Formats and codes

156pp E 21838 F 21839 S 21840 61 CHF

**Q.1902.3 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

## Q.1902.3 Corrigendum 1 (04/02)

To be published...

Q.1902.4 (07/01) Bearer independent call control protocol (Capability Set 2): Basic call procedures

140pp E 22029 F 22030 S 22031 55 CHF

**Q.1902.4 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

#### O.1902.4 Corrigendum 1 (04/02)

To be published...

Q.1902.5 (07/01) Bearer Independent Call Control protocol (Capability Set 2): Exceptions to the application transport mechanism in the context of BICC

8pp E 21666 F 21667 S 21668 9 CHF

**Q.1902.6 (07/01)** Bearer Independent Call Control protocol (Capability Set 2): Generic signalling procedures for the support of the ISDN user part supplementary services and for bearer redirection

24pp E 21767 F 21768 S 21769 17 CHF

Q.1912.1 (07/01) Interworking between Signalling System No. 7 ISDN user part and the Bearer Independent Call Control protocol

12pp E 21669 F 21670 S 21671 12 CHF

Q.1912.2 (07/01) Interworking between selected signalling systems (PSTN access, DSS1, C5, R1, R2, TUP) and the Bearer Independent Call Control protocol

16pp E 21718 F 21719 S 21720 12 CHF

Q.1912.3 (07/01) Interworking between H.323 and the Bearer Independent Call Control protocol

12pp E 21672 F 21673 S 21674 12 CHF

Q.1912.4 (07/01) Interworking between Digital Subscriber Signalling System No. 2 and the Bearer Independent Call Control protocol

8pp E 21675 F 21676 S 21677 9 CHF

Q.1922.2 (07/01) Interaction between the Intelligent Network application protocol Capability set 2 and the Bearer independent call control protocol

8pp E 21660 F 21661 S 21662 9 CHF

Q.1922.4 (12/02) Interaction between the Intelligent Network application CS4 protocol and the Bearer Independent Call Control protocol

To be published...

Q.1930 (04/02) BICC Access Network Protocol

82pp E 22723 F 22724 S 22725 34 CHF

Q.1950 (12/02) Bearer independent call bearer control protocol

To be published...

Q.1970 (07/01) BICC IP Bearer control protocol

16pp E 21546 F 21547 S 21548 12 CHF

Q.1990 (07/01) BICC Bearer Control Tunnelling Protocol

12pp E 21678 F 21679 S 21680 12 CHF

## **Broadband ISDN**

General aspects

**Q.2010 (02/95)** Broadband integrated services digital network overview – Signalling capability set 1, release 1

8pp E 5924 F 5923 S 5925 11 CHF

Signalling ATM adaptation layer (SAAL)

**Q.2100 (07/94)** B-ISDN signalling ATM adaptation layer (SAAL) – Overview description

3pp E 5588 F 5587 S 5589 8 CHF

**Q.2110 (07/94)** B-ISDN ATM adaptation layer – Service specific connection oriented protocol (SSCOP)

95pp E 5674 F 5673 S 5675 39 CHF

Q.2111 (12/99) Service specific connection oriented protocol in a multi-link and connectionless environment (SSCOPMCE)

120pp E 20058 F 20059 S 20060 49 CHF

Q.2111 Amendment 1 (07/01) Amendment 1 – B-ISDN ATM adaptation layer – Service specific connection oriented protocol in a multilink and connectionless environment (SSCOPMCE)

48pp E 21898 F 21899 S 21900 22 CHF

**Q.2111 Amendment 2 (04/02)** API for SSCOPMCE over Ethernet

26pp E 22401 F 22402 S 22403 17 CHF

**Q.2119 (07/96)** B-ISDN ATM adaptation layer – Convergence function for SSCOP above the frame relay core service

16pp E 10452 F 10453 S 10454 12 CHF

Q.2120 (02/95) B-ISDN meta-signalling protocol

56pp E 6044 F 6043 S 6045 24 CHF

**Q.2130 (07/94)** B-ISDN signalling ATM adaptation layer – Service specific coordination function for support of signalling at the user-network interface (SSCF at UNI)

54pp E 5677 F 5676 S 5678 25 CHF

**Q.2140 (02/95)** B-ISDN ATM adaptation layer – Service specific coordination function for signalling at the network node interface (SSCF AT NNI)

61pp E 6135 F 6134 S 6136 25 CHF

118 ITU-T 02/03 - Series Q

**Q.2144 (10/95)** B-ISDN signalling ATM adaptation layer – Layer management for the SAAL at the network node interface

32pp E 7096 F 7097 S 7098 17 CHF

Q.2150.0 (05/01) Generic signalling transport service

14pp E 20804 F 20805 S 20806 12 CHF

Q.2150.1 (05/01) Signalling Transport Converter on MTP3 and MTP3b

36pp E 20678 F 20679 S 20680 22 CHF

**Q.2150.2 (05/01)** Signalling transport converter on SSCOP and SSCOPMCE

32pp E 20794 F 20795 S 20796 22 CHF

Q.2150.3 (12/02) Signalling transport converter on SCTP

To be published...

Signalling network protocols

**Q.2210 (07/96)** Message transfer part level 3 functions and messages using the services of ITU-T Recommendation Q.2140

28pp E 10106 F 10107 S 10108 17 CHF

Q.2220 (12/02) Transport-Independent Signalling Connection Control Part (TI-SCCP)

To be published...

Common aspects of B-ISDN application protocols for access signalling and network signalling and interworking

**Q.2610 (12/99)** Usage of cause and location in B-ISDN user part and DSS2

8pp E 17657 F 17658 S 17659 9 CHF

**Q.2630.1 (12/99)** AAL type 2 signalling protocol (Capability Set 1)

88pp E 19430 F 19431 S 19432 39 CHF

**Q.2630.1 Annex B (03/01)** Annex B: SDL definition of the AAL type 2 signalling protocol CS-1

70pp E 20867 F 20868 S 20869 34 CHF

**Q.2630.2 (12/00)** AAL type 2 signalling protocol – Capability Set 2

56pp E 20864 F 20865 S 20866 29 CHF

**Q.2630.2 Annex D (04/02)** SDL definition of the AAL Type 2 signalling protocol

To be published...

Q.2650 (12/99) Interworking between Signalling System No. 7 broadband ISDN User Part (B-ISUP) and digital subscriber Signalling System No. 2 (DSS 2)

44pp E 18785 F 18786 S 18787 22 CHF

**Q.2660 (12/99)** Interworking between signalling system No. 7 broadband ISDN User Part (B-ISUP) and narrow-band ISDN User Part (N-ISUP)

36pp E 17764 F 17765 S 17766 22 CHF

*B-ISDN* application protocols for the network signalling

## Q.2721.1 (07/96) Withdrawn (05/00)

B-ISDN user part – Overview of the B-ISDN Network Node Interface Signalling Capability Set 2, Step 1

The content of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

24pp E 10568 F 10569 S 10570 17 CHF

**Q.2722.1 (07/96)** B-ISDN User Part – Network Node Interface specification for point-to-multipoint call/connection control

68pp E 10630 F 10631 S 10632 34 CHF

Q.2722.1 Amendment 1 (06/00)

8pp E 19737 F 19738 S 19739 9 CHF

## Q.2723.1 (07/96) Withdrawn (05/00)

B-ISDN User Part – Support of additional traffic parameters for Sustainable Cell Rate and Quality of Service

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 10489 F 10490 S 10491 12 CHF

## Q.2723.2 (09/97) Withdrawn (05/00)

Extensions to the B-ISDN User Part – Support of ATM transfer capability in the broadband bearer capability parameter

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

12pp E 12719 F 12720 S 12721 12 CHF

## Q.2723.3 (09/97) Withdrawn (05/00)

Extensions to the B-ISDN User Part – Signalling capabilities to support traffic parameters for the Available Bit Rate (ABR) ATM transfer capability

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 12722 F 12723 S 12724 12 CHF

## Q.2723.4 (09/97) Withdrawn (05/00)

Extensions to the B-ISDN User Part – Signalling capabilities to support traffic parameters for the ATM Block Transfer (ABT) ATM transfer capability

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 12741 F 12742 S 12743 12 CHF

## Q.2723.5 (03/99) Withdrawn (05/00)

B-ISDN User Part – Support of cell delay variation tolerance indication

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 16543 F 16544 S 16545 12 CHF

## Q.2723.6 (05/98) Withdrawn (05/00)

Extensions to the Signalling System No. 7 B-ISDN User Part – Signalling capabilities to support the indication of the Statistical Bit Rate configuration 2 (SBR 2) and 3 (SBR 3) ATM transfer capabilities

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

8pp E 13601 F 13602 S 13603 9 CHF

**Q.2724.1 (07/96)** B-ISDN User Part – Look-ahead without state change for the Network Node Interface

32pp E 10761 F 10762 S 10763 17 CHF

## Q.2725.1 (05/98) Withdrawn (05/00)

B-ISDN User Part – Support of negotiation during connection setup

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 13715 F 13716 S 13717 12 CHF

#### Q.2725.2 (07/96) Withdrawn (05/00)

B ISDN User Part – Modification procedures

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

28pp E 10807 F 10808 S 10809 22 CHF

#### O.2725.3 (09/97) Withdrawn (05/00)

Extensions to the B-ISDN User Part – Modification procedures for sustainable cell rate parameters

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

12pp E 12598 F 12599 S 12600 12 CHF

## Q.2725.4 (05/98) Withdrawn (05/00)

Extensions to the Signalling System No. 7 B-ISDN User Part – Modification procedures with negotiation

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 13718 F 13719 S 13720 12 CHF

## Q.2726.1 (07/96) Withdrawn (05/00)

B-ISDN user part – ATM end system address

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

16pp E 10492 F 10493 S 10494 12 CHF

**Q.2726.2 (07/96)** B-ISDN user part – Call priority

12pp E 10574 F 10576 S 10577 12 CHF

**Q.2726.3 (07/96)** B-ISDN user part – Network generated session identifier

12pp E 10575 F 10578 S 10579 12 CHF

**Q.2726.4 (06/00)** Extensions to the B-ISDN User Part – Application generated identifiers

12pp E 19448 F 19449 S 19450 12 CHF

## Q.2727 (07/96) Withdrawn (05/00)

B-ISDN user part – Support of frame relay

The contents of this Rec. is now covered by ITU-T Recs. Q.2761, Q.2762, Q.2763 and Q.2764 approved in 12/1999

12pp E 10455 F 10456 S 10457 12 CHF

**Q.2730 (12/99)** Signalling system No. 7 B-ISDN user part (B-ISUP) – Supplementary services

40pp E 17684 F 17685 S 17686 22 CHF

Q.2735 Stage 3 description for community of interest supplementary services for B-ISDN using SS No. 7

**Q.2735.1 (06/97)** Closed User Group (CUG)

20pp E 12022 F 12023 S 12024 17 CHF

Q.2751.1 (09/97) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

64pp E 12668 F 12669 S 12670 29 CHF

**Q.2761 (12/99)** Functional description of the B-ISDN user part (B-ISUP) of signalling system No. 7

40pp E 18774 F 18775 S 18776 22 CHF

*B-ISDN* application protocols for access signalling

**Q.2761 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

*B-ISDN* application protocols for the network signalling

**Q.2762 (12/99)** General functions of messages and signals of the B-ISDN user part (B-ISUP) of Signalling System No. 7

36pp E 18720 F 18721 S 18722 22 CHF

B-ISDN application protocols for access signalling

**Q.2762 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

*B-ISDN* application protocols for the network signalling

Q.2763 (12/99) Signalling System No. 7 B-ISDN User Part (B-ISUP) – Formats and codes

92pp E 19668 F 19669 S 19670 39 CHF

B-ISDN application protocols for access signalling

**Q.2763 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

*B-ISDN* application protocols for the network signalling

**Q.2764 (12/99)** Signalling System No. 7 B-ISDN User Part (B-ISUP) – Basic call procedures

200pp E 19636 F 19637 S 19638 73 CHF

B-ISDN application protocols for access signalling

**Q.2764 Amendment 1 (12/02)** Support for the international emergency preference scheme

To be published...

*B-ISDN* application protocols for the network signalling

Q.2765 (12/99) Signalling System No. 7 B-ISDN User Part (B-ISUP) – Application transport mechanism (APM)

16pp E 19053 F 19054 S 19055 12 CHF

Q.2766.1 (05/98) Switched virtual path capability

36pp E 14176 F 14177 S 14178 22 CHF

Q.2766.1 Amendment 1 (06/00)

12pp E 19779 F 19780 S 19781 12 CHF

**Q.2767.1 (06/00)** Soft PVC capability

24pp E 19549 F 19550 S 19551 17 CHF

**Q.2769.1 (06/00)** Support of number portability information across B-ISUP

16pp E 19822 F 19823 S 19824 12 CHF

B-ISDN application protocols for access signalling

Q.2931 (02/95) Digital Subscriber Signalling System No. 2 – User-Network Interface (UNI) layer 3 specification for basic call/connection control

Modified by ITU-T Q.2971 (10/1995).

248pp E 6312 F 6313 S 6314 80 CHF

Q.2931C (12/00) Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS 2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Test Suite Structure and Test Purposes (TSS & TP) for the user

12pp E 20360 9 CHF

Q.2931B (12/00) Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS 2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Protocol implementation conformance statement (PICS) proforma

34pp E 20419 22 CHF

Q.2931D (12/00) Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS 2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the

12pp E 20467 9 CHF

Q.2931E (12/00) Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS 2) – User-network interface (UNI) layer 3 specification for basic call/connection control: Test Suite Structure and Test Purposes (TSS & TP) for the Network

8pp E 20470 9 CHF

Q.2931F (12/00) Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling system No. 2 (DSS 2) – User-network interface (UNI) layer 3 specification for basic call/connection control – Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

12pp E 20422 F 20423 S 20424 12 CHF

Q.2931 Amendment 1 (06/97)

8pp E 12025 F 12026 S 12027 9 CHF

Q.2931 Amendment 2 (03/99)

20pp E 16616 F 16617 S 16618 17 CHF

Q.2931 Amendment 2 Corrigendum 1 (06/00)

Q.2931 Amendment 3 (03/99)

8pp E 16604 F 16605 S 16606 9 CHF

Q.2931 Amendment 4 (12/99)

80pp E 19409 F 19410 S 19411 34 CHF

Q.2932 Digital Subscriber Signalling System No. 2 – Generic functional protocol

Q.2932.1 (07/96) Core functions

100pp E 10153 F 10154 S 10155 44 CHF

**Q.2933 (07/96)** Digital Subscriber Signalling System No. 2 – Signalling specification for Frame Relay service

16pp E 10458 F 10459 S 10460 12 CHF

**Q.2934 (05/98)** Digital Subscriber Signalling System No. 2 – Switched virtual path capability

20pp E 14191 F 14192 S 14193 17 CHF

Q.2939.1 (09/97) Digital Subscriber Signalling System No. 2 – Application of DSS2 service-related information elements by equipment supporting B-ISDN services

12pp E 12671 F 12672 S 12673 12 CHF

**Q.2941.1 (09/97)** Digital Subscriber Signalling System No. 2 – Generic identifier transport

12pp E 12734 F 12735 S 12736 12 CHF

**Q.2941.2 (12/99)** Digital Subscriber Signalling System No. 2 – Generic identifier transport extensions

16pp E 18909 F 18910 S 18911 12 CHF

Q.2941.3 (06/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

8pp E 19451 F 19452 S 19453 9 CHF

Q.2951 Stage 3 description for number identification supplementary services using B-ISDN Digital Subscriber Signalling System No. 2 (DSS2) – Basic Call

Q.2951.1-8 (02/95) Stage 3 description for number identification supplementary services using B-ISDN Digital Subscriber Signalling System No. 2 (DSS2) – Basic Call

E 6111 25 CHF

Q.2951 Corrigendum 1 (05/98)

**Q.2951.9 (12/99)** Support of ATM end system addressing format by Number identification supplementary services

16pp E 18894 F 18895 S 18896 12 CHF

Q.2955 Stage 3 description for community of interest supplementary services using B-ISDN Digital Subscriber Signalling System No. 2 (DSS2)

**Q.2955.1 (06/97)** Closed User Group (CUG)

24pp E 12239 F 12240 S 12241 17 CHF

Q.2957 Stage 3 description for additional information transfer supplementary services using B-ISDN digital subscriber Signalling System No.2 (DSS 2) – Basic call

**Q.2957.1 (02/95)** User-to-user signalling (UUS)

Modified by ITU-T Q.2971 (10/1995).

10pp E 6010 F 6009 S 6011 11 CHF

Q.2957.1 Amendment 1 (12/99)

8pp E 18652 F 18653 S 18654 9 CHF

**Q.2959 (07/96)** Digital subscriber signalling system No. 2 – Call priority

16pp E 10495 F 10496 S 10497 12 CHF

Q.2961 Digital Subscriber Signalling System No. 2 – Additional traffic parameters

Q.2961B (12/00) Digital subscriber signalling system No. 2 (DSS 2) – Additional traffic parameters: Protocol implementation conformance statement (PICS) proforma

34pp E 20364 17 CHF

Q.2961C (12/00) Digital subscriber signalling system No. 2 (DSS 2) – Additional traffic parameters: Test Suite Structure and Test Purposes (TSS & TP) for the user

12pp E 20368 9 CHF

Q.2961D (12/00) Digital subscriber signalling system No. 2 (DSS 2) – Additional traffic parameters: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the user

12pp E 20371 9 CHF

Q.2961E (12/00) Digital subscriber signalling system No. 2 (DSS 2) – Additional traffic parameters: Test Suite Structure and Test Purposes (TSS & TP) for the network

12pp E 20374 9 CHF

Q.2961F (12/00) Digital subscriber signalling system No. 2 (DSS 2) – Additional traffic parameters: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the Network

12pp E 20377 9 CHF

**Q.2961.1 (10/95)** Additional signalling capabilities to support traffic parameters for the tagging option and the sustainable cell rate parameter set

16pp E 6983 F 6984 S 6985 11 CHF

Q.2961.2 (06/97) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

16pp E 12302 F 12303 S 12304 12 CHF

## Q.2961.2 Corrigendum 1 (03/99)

Q.2961.3 (09/97) Signalling capabilities to support traffic parameters for the available bit rate (ABR) ATM transfer capability

20pp E 12806 F 12807 S 12808 17 CHF

**Q.2961.4 (09/97)** Signalling capabilities to support traffic parameters for the ATM Block Transfer (ABT) ATM transfer capability

16pp E 12809 F 12810 S 12811 12 CHF

Q.2961.5 (03/99) Additional traffic parameters for cell delay variation tolerance indication

20pp E 16607 F 16608 S 16609 17 CHF

**Q.2961.6 (05/98)** Additional signalling procedures for the support of the SBR2 and SBR3 ATM transfer capabilities

12pp E 14169 F 14170 S 14171 12 CHF

**Q.2962 (05/98)** Digital Subscriber Signalling System No. 2 – Connection characteristics negotiation during call/connection establishment phase

16pp E 13721 F 13722 S 13723 12 CHF

Q.2962F (12/00) Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

12pp E 20389 9 CHF

Q.2962B (12/00) Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Protocol Implementation Conformance Statement (PICS) proforma

12pp E 20380 9 CHF

Q.2962D (12/00) Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the user

12pp E 20386 9 CHF

Q.2962E (12/00) Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Test Suite Structure and Test Purposes (TSS & TP) for the network

12pp E 20464 9 CHF

Q.2962C (12/00) Digital subscriber signalling system No. 2 – Connection characteristics negotiation during call/connection establishment phase: Test Suite Structure and Test Purposes (TSS & TP) for the user

12pp E 20383 9 CHF

Q.2963 Digital Subscriber Signalling System No. 2 – Connection modification

Q.2963.1 (12/99) Peak cell rate modification by the connection owner

36pp E 18883 F 18884 S 18885 22 CHF

Q.2963.1B (12/00) Digital subscriber signalling system No. 2 – Connection modification: Peak cell rate modification by the connection owner: Protocol Implementation Conformance Statement (PICS) proforma

ITU-T Q.2963.1 B was previously numbered as Q.2963.1 bis during the approval process

12pp E 20345 9 CHF

Q.2963.1C (12/00) Digital subscriber signalling system No. 2 – Connection modification: Peak cell rate modification by the connection owner: Test Suite Structure and Test Purposes (TSS & TP) for the user

ITU-T Q.2963.1 C was previously numbered as Q.2963.1 ter during the approval process

12pp E 20348 9 CHF

Q.2963.1D (12/00) Digital subscriber signalling system No. 2 – Connection modification: Peak cell rate modification by the connection owner: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the user

ITU-T Q.2963.1 D was previously numbered as Q.2963.1 quater during the approval process

12pp E 20351 9 CHF

Q.2963.1E (12/00) Digital subscriber signalling system No. 2 – Connection modification: Peak cell rate modification by the connection owner: Test Suite Structure and Test Purposes (TSS & TP) for the network

ITU-T Q.2963.1 E was previously numbered as Q.2963.1 quinquies during the approval process

12pp E 20354 9 CHF

Q.2963.1F (12/00) Digital subscriber signalling system No. 2 – Connection modification: Peak cell rate modification by the connection owner: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

ITU-T Q.2963.1 F was previously numbered as Q.2963.1 sexies during the approval process

12pp E 20357 9 CHF

**Q.2963.2 (09/97)** Modification procedures for sustainable cell rate parameters

12pp E 12565 F 12566 S 12567 12 CHF

**Q.2963.3 (05/98)** ATM traffic descriptor modification with negotiation by the connection owner

16pp E 14149 F 14150 S 14151 12 CHF

Q.2964 Digital Subscriber Signalling System No. 2

Q.2964.1 (07/96) Basic Look-Ahead

20pp E 10654 F 10655 S 10656 17 CHF

Q.2965.1 (03/99) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

12pp E 16610 F 16611 S 16612 12 CHF

O.2965.1 Amendment 1 (06/00)

8pp E 19707 F 19708 S 19709 9 CHF

**Q.2965.1B** (12/00) Digital subscriber signalling system No. 2 – Support of Quality of Service classes: Protocol Implementation Conformance Statement (PICS) proforma

ITU-T Q.2965 B was previously numbered as Q.2965.1 bis during the approval process

22pp E 20527 F 20528 S 20529 17 CHF

Q.2965.2 (12/99) Digital Subscriber Signalling System No. 2 – Signalling of individual Quality of Service parameters

20pp E 18880 F 18881 S 18882 17 CHF

Q.2965.2B (12/00) Digital subscriber signalling system No. 2 – Signalling of individual Quality of Service parameters: Protocol Implementation Conformance Statement (PICS) proforma

ITU-T Q.2965 B was previously numbered as Q.2965.2 bis during the approval process

26pp E 20446 F 20447 S 20448 17 CHF

Q.2971 (10/95) Digital Subscriber Signalling System No. 2 (DSS2) – User-network interface layer 3 specification for point-to-multipoint call/connection control

Modifies ITU-T Q.2931, Q.2951 and Q.2957.

172pp E 6944 F 6945 S 6946 65 CHF

Q.2971D (12/99) Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the user

ITU-T Q.2971 D was previously numbered as Q.2971 quater during the approval process

16pp E 18637 F 18638 S 18639 12 CHF

Q.2971E (12/99) Digital subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Test Suite Structure and Test Purposes (TSS & TP) for the network

ITU-T Q.2971 E was previously numbered as Q.2971 quinquies during the approval process

12pp E 18640 F 18641 S 18642 12 CHF

Q.2971C (12/99) Digital Subscriber signalling system No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Test Suite Structure and Test Purposes (TSS & TP) for the user

ITU-T Q.2971 C was previously numbered as Q.2971 ter during the approval process

8pp E 18655 F 18656 S 18657 9 CHF

Q.2971F (12/99) Digital Subscriber Signalling System No. 2 – User-network interface layer 3 specification for point-to-multipoint call/connection control: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma for the network

ITU-T Q.2971 F was previously numbered as Q.2971 sexies during the approval process

20pp E 18658 F 18659 S 18660 17 CHF

## Q.2971 Corrigendum 1 (12/99)

**Q.2981 (12/99)** Broadband integrated services digital network (B-ISDN) and broadband private integrated services network (B-PISN) – Call control protocol

68pp E 19546 F 19547 S 19548 34 CHF

Q.2982 (12/99) Broadband integrated services digital network (B-ISDN) – Digital Subscriber Signalling System No. 2 (DSS2) – Q.2931-based separated call control protocol

28pp E 17669 F 17670 S 17671 17 CHF

Q.2983 (12/99) Broadband integrated services digital network (B-ISDN) – Digital subscriber signalling No. 2 (DSS2) – Bearer control protocol

16pp E 17672 F 17673 S 17674 12 CHF

Q.2984 (12/99) Broadband integrated services digital network (B-ISDN) and broadband private integrated services network (B-PISN) – Pre-negotiation

24pp E 18780 F 18781 S 18782 17 CHF

Q.2991 (12/99) Abstract test suite for the network integration testing for B-ISDN and B-ISDN/N-ISDN

To be published...

Q.2991.1 (12/99) Abstract test suite for the network integration testing for B-ISDN and B-ISDN/N-ISDN: TSS & TP

This Recommendation includes an electronic attachment containing Test Purpose list for network integration testing

16pp E 19661 F 19662 S 19663 62 CHF

## Q.2991.2 (12/99) ICS & IXIT and ATS

This Recommendation includes an electronic attachment containing the ATS in machine processable form and in pdf form for network integration testing

42pp E 19614 F 19615 S 19616 72 CHF

## **Supplements to the Series Q Recommendations**

**Suppl. 1 (10/95)** Signalling System No. 7 testing and planning tools

16pp E 7003 F 7004 S 7005 11 CHF

**Suppl. 2 (09/97)** Intelligent Network user's guide: Supplement for

## IN CS-1

Formerly Suppl.1 to ITU-T Recommendation Q.1219

20pp E 13079 F 13080 S 13081 17 CHF

**Suppl. 3 (05/98)** Number portability – Scope and capability set 1 architecture

51pp E 15895 F 15896 S 15897 22 CHF

**Suppl. 4 (05/98)** Number portability – Call control for capability set 1 service provider portability (All call query and Onward routing)

29pp E 14632 F 14633 S 14634 17 CHF

**Suppl. 5 (03/99)** Number portability – Capability set 2 requirements for service provider portability (Query on release and Dropback)

50pp E 16399 F 16400 S 16401 22 CHF

**Suppl. 6 (03/99)** Technical report TRQ.2000: Roadmap for the TRQ.2xxx-series technical reports

17pp E 16217 F 16218 S 16219 12 CHF

**Suppl. 7 (03/99)** Technical report TRQ.2001: General aspects for the development of unified signalling requirements

84pp E 16496 F 16497 S 16498 39 CHF

Suppl. 8 (03/99) Technical report TRQ.2400:

Transport control signalling requirements – Signalling requirements for AAL Type 2 link control capability set 1

20pp E 16220 F 16221 S 16222 17 CHF

Suppl. 9 (02/03) Technical Report TRQ.2000: Roadmap for the TRQ.2xxx-series technical reports To be published... **Suppl. 10 (12/99)** Technical Report TRQ.2002: Information Flow Elements E 18607 F 18607 S 18607 22 CHF 36pp **Suppl. 11 (12/99)** Technical Report TRQ.2010: B-ISDN signalling interworking requirements E 18627 F 18627 S 18627 12 CHF 16pp Suppl. 12 (12/99) Technical Report TRQ.2100 E 19376 F 19377 S 19378 73 CHF Suppl. 13 (12/99) Technical Report TRQ.2110 E 19120 F 19121 S 19122 116pp 49 CHF **Suppl. 14 (12/99)** Technical Report TRQ.2120: Coordinated call control and bearer control signalling requirements – Third party coordinated call and bearer control Available as a prepublished version E 18684 F 18685 S 18686 22 CHF 44pp Suppl. 15 (12/99) Technical Report TRQ.2130 E 18931 F 18932 S 18933 29 CHF 60pp Suppl. 16 (12/99) Technical Report TRQ.2140 E 19627 F 19628 S 19629 44 CHF Suppl. 17 (12/99) Technical Report TRQ.2200 E 18912 F 18913 52pp S 18914 29 CHF Suppl. 18 (12/99) Technical Report TRQ.2230 E 18906 F 18907 S 18908 40pp 22 CHF Suppl. 19 (12/99) Technical Report TRQ.2300 E 19177 F 19178 S 19171 39 CHF 96pp **Suppl. 20 (12/99)** Technical Report TRQ.2310 E 18934 F 18935 S 18936 64pp **29 CHF Suppl. 21 (12/99)** Technical Report TRQ.2320 E 18900 F 18901 S 18902 22 CHF Suppl. 22 (12/99) BICC-DSS2 Mapping E 18877 F 18878 S 18879 17pp 12 CHF Suppl. 23 (12/99) BICC-AAL2 Signalling Mapping E 19412 F 19413 S 19414 12 CHF Suppl. 24 (12/99) BICC-B-ISUP Signalling Mapping E 19298 F 19299 S 19300 12 CHF 12pp Suppl. 25 (12/99) Q.29xx E 16805 F 19327 S 19328 36 CHF Suppl. 26 (12/99) Support of the Internet F 19330 12pp E 19329 S 19331 12 CHF Suppl. 27 (12/99) Overview of SPFEE (Signalling and Protocol Framework for an Emerging Environment)

Suppl. 28 (12/99) SPFEE (Signalling and Protocol Framework for an Emerging Environment) Specifications for Service Access

144pp E 19518 F 19519 S 19520 55 CHF

**Suppl. 29 (12/99)** Service Modelling: Evolution to the Use of Object Oriented Techniques

24pp E 19415 F 19416 S 19417 17 CHF

Suppl. 30 (12/00) Supplement to ITU-T Recommendation Q.1701: Specifications of international mobile telecommunications-2000 (IMT-2000)

112pp E 20243 F 20244 S 20245

To be published...

Suppl. 31 (12/00) Technical report TRQ.2141.0: Signalling requirements for the support of narrowband services over broadband transport technologies – Capability set 2 (CS-2)

34pp E 20767 F 20768 S 20769 17 CHF

Suppl. 32 (02/03) Technical Report TRQ.2141.1: Signalling requirements for the support of narrow-band services via broadband transport technologies – CS-2 signalling flows

To be published...

**Suppl. 33 (12/00)** Supplement 33 (12/00) to Series Q Recommendations – TRQ.2401: Requirements for Q.AAL2 Capability Set 2

20pp E 20596 F 20597 S 20598 12 CHF

Suppl. 34 (12/00) Technical report TRQ.2410: Signalling requirements capability set 1 for support of IP bearer control in BICC networks

12pp E 20638 F 20639 S 20640 10 CHF

**Suppl. 35 (12/00)** Technical report TRQ.2500: Signalling requirements for the support of the call bearer control interface (CS-1)

84pp E 20773 F 20774 S 20775 34 CHF

Suppl. 36 (12/00) Technical report TRQ.3030: Operation of the bearer independent call control (BICC) protocol (CS-2) with IP bearer control protocol (IPBCP)

14pp E 20641 F 20642 S 20643 12 CHF

ITU-T 02/03 - Series Q

E 19439 F 19440

S 19441

22 CHF

Available as a prepublished version

48pp

126

**Suppl. 37 (12/00)** DSS1 and DSS2 messages and information element identifiers

20pp E 20599 F 20600 S 20601 12 CHF

**Suppl. 38 (01/03)** Technical report TRQ.2600 – BICC signalling transport requirements, capability set 1

20pp E 20476 F 20477 S 20478 17 CHF

**Suppl. 39 (02/03)** Technical Report TRQ.2700: Requirements for signalling in access networks that support BICC

193pp E 22760 F 22761 S 22762 73 CHF

**Suppl. 40 (02/03)** Technical Report: Reference document on API/object interface between network control and application layer

To be published...

**Suppl. 41 (02/03)** Technical Report TRQ.2003: Roadmap to the BICC protocol Recommendations, BICC interworking Recommendations, and BICC requirement supplements

To be published...

## SERIES R

## **Telegraph transmission**

## Telegraph distortion

R.2 (11/88) Element error rate

*Individually through the Electronic Bookshop:* 20 CHF

**R.4 (11/88)** Methods for the separate measurements of the degrees of various types of telegraph distortion

*Individually through the Electronic Bookshop:* 20 CHF

**R.5 (03/93)** Observation conditions recommended for routine distortion measurements on international telegraph circuits

1pp E 4710 F 4709 S 4711 8 CHF

**R.9** (03/93) How the laws governing distribution of distortion should be arrived at

2pp E 4545 F 4544 S 4546 8 CHF

**R.11 (03/93)** Calculation of the degree of distortion of a telegraph circuit in terms of the degrees of distortion of the component links

2pp E 5044 F 5043 S 5045 8 CHF

*Voice-frequency telegraphy* 

**R.20 (11/88)** Telegraph modem for subscriber lines

*Individually through the Electronic Bookshop:* 20 CHF

**R.21 (08/96)** 9600 bit/s modem standardized for use in the telegraph TDM system

8pp E 9643 F 9644 S 9645 9 CHF

**R.22 (08/96)** Data over voice 19200 bit/s modem standarized for use on telephone network subscriber lines

8pp E 9716 F 9717 S 9718 9 CHF

R.30 (11/88) Transmission characteristic for international VFT links

*Individually through the Electronic Bookshop:* 20 CHF

**R.31 (11/88)** Standardization of AMVFT systems for a modulation rate of 50 bauds

Individually through the Electronic Bookshop: 20 CHF

**R.35bis (11/88)** 50-baud wideband VFT systems

*Individually through the Electronic Bookshop:* 20 CHF

**R.35 (11/88)** Standardization of FMVFT systems for a modulation rate of 50 bauds

Individually through the Electronic Bookshop: 20 CHF

R.36 (11/88) Coexistence of 50-baud/120-Hz channels, 100-baud/240-Hz channels, 200-baud/360-Hz or 480-Hz channels on the same voice-frequency telegraph system

*Individually through the Electronic Bookshop:* 20 CHF

**R.37 (11/88)** Standardization of FMVFT systems for a modulation rate of 100 bauds

*Individually through the Electronic Bookshop:* 20 CHF

**R.38 A (11/88)** Standardization of FMVFT system for a modulation rate of 200 bauds with channels spaced at 480 Hz

*Individually through the Electronic Bookshop:* 20 CHF

R.38B (11/88) 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

Individually through the Electronic Bookshop: 20 CHF

**R.39 (11/88)** Voice-frequency telegraphy on radio circuits

Individually through the Electronic Bookshop: 20 CHF

*Special cases of alternating current telegraphy* 

**R.40 (11/88)** Coexistence in the same cable of telephony and super-telephone telegraphy

*Individually through the Electronic Bookshop:* 20 CHF

**R.43 (11/88)** Simultaneous communication by telephone and telegraph on a telephone-type circuit

Individually through the Electronic Bookshop: 20 CHF

R.44 (11/88) 6-unit synchronous time-division 2-3-channel multiplex telegraph system for use over FMVFT channels spaced at 120 Hz for connection to standardized teleprinter networks

*Individually through the Electronic Bookshop:* 20 CHF

**R.49 (11/88)** Interband telegraphy over open-wire 3-channel carrier systems

Individually through the Electronic Bookshop: 20 CHF

Transmission quality

R.50 (11/88) Tolerable limits for the degree of isochronous distortion of code-independent 50-baud telegraph circuits

Individually through the Electronic Bookshop: 20 CHF

**R.51bis** (11/88) Standardized text for testing the elements of a complete circuit

20 CHF Individually through the Electronic Bookshop:

**R.51 (11/88)** Standardized text for distortion testing of the code-independent elements of a complete circuit

Individually through the Electronic Bookshop: 20 CHF

**R.52** (11/88) Standardization of international texts for the measurement of the margin of start-stop equipment

Individually through the Electronic Bookshop: 20 CHF

**R.53 (11/88)** Permissible limits for the degree of distortion on an international 50-baud/120-Hz VFT channel (frequency and amplitude modulation)

Individually through the Electronic Bookshop: 20 CHF R.54 (03/93) Conventional degree of distortion tolerable for standardized start-stop 50-baud systems

> E 4572 F 4571 S 4573 8 CHF

**R.55** (03/93) Conventional degree of distortion 1pp E 4539 F 4538 S 4540 8 CHF

**R.56 (03/93)** Telegraph distortion limits to be quoted in Recommendations for equipment and transmission

S 4597 1pp E 4596 F 4595 8 CHF

**R.57 (11/88)** Standard limits of transmission quality for planning code-independent international point-to-point telegraph communications and switched networks using 50-baud start-stop equipment

Individually through the Electronic Bookshop: 20 CHF

**R.58 (11/88)** Standard limits of transmission quality for the gentex and telex networks

Individually through the Electronic Bookshop: 20 CHF

**R.58bis** (11/88) Limits on signal transfer delay for telegraph, telex and gentex networks

*Individually through the Electronic Bookshop:* 20 CHF

**R.59 (11/88)** Interface requirements for 50-band start-stop telegraph transmission in the maritime mobile satellite service

Individually through the Electronic Bookshop: 20 CHF

## Correction of signals

**R.60 (11/88)** Conditions to be fulfilled by regenerative repeaters for start-stop signals of International Telegraph Alphabet No. 2

*Individually through the Electronic Bookshop:* 20 CHF

**R.62 (11/88)** Siting of regenerative repeaters in international telex circuits

Individually through the Electronic Bookshop: 20 CHF

Telegraph maintenance

**R.70 (11/88)** Designation of international telegraph circuits

Individually through the Electronic Bookshop: 20 CHF

**R.70bis (11/88)** Numbering of international VFT channels

Individually through the Electronic Bookshop: 20 CHF

**R.71 (11/88)** Organization of the maintenance of international telegraph circuits

Individually through the Electronic Bookshop: 20 CHF

**R.72 (11/88)** Periodicity of maintenance measurements to be carried out on the channels of international VFT systems

Individually through the Electronic Bookshop: 20 CHF R.73 (11/88) Maintenance measurements to be carried out on VFT systems

*Individually through the Electronic Bookshop:* 20 CHF

**R.74 (11/88)** Choice of type of telegraph distortion-measuring equipment

*Individually through the Electronic Bookshop:* 20 CHF

**R.75bis (11/88)** Maintenance measurements of character error rate on international sections of international telegraph circuits

Individually through the Electronic Bookshop: 20 CHF

**R.75 (11/88)** Maintenance measurements on code-independent international sections of international telegraph circuits

*Individually through the Electronic Bookshop:* 20 CHF

**R.76 (11/88)** Reserve channels for maintenance measurements on channels of international VFT systems

*Individually through the Electronic Bookshop:* 20 CHF

**R.77 (11/88)** Use of bearer circuits for voice-frequency telegraphy

*Individually through the Electronic Bookshop:* 20 CHF

**R.78 (11/88)** Pilot channel for AMVFT systems *Individually through the Electronic Bookshop:* 20 CHF

**R.79 (11/88)** Automatic tests of transmission quality on telegraph circuits between switching centres *Individually through the Electronic Bookshop:* 20 CHF

R.80 (11/88) Causes of disturbances to signals in VFT channels and their effect on telegraph distortionIndividually through the Electronic Bookshop: 20 CHF

**R.81 (11/88)** Maximum acceptable limit for the duration of interruption of telegraph channels arising from failure of the normal power supplies

Individually through the Electronic Bookshop: 20 CHF

**R.82 (11/88)** Appearance of false calling and clearing signals in circuits operated by switched teleprinter services

*Individually through the Electronic Bookshop:* 20 CHF

**R.83 (11/88)** Changes of level and interruptions in VFT channels

*Individually through the Electronic Bookshop:* 20 CHF

**R.90 (11/88)** Organization for locating and clearing faults in international telegraph switched networks *Individually through the Electronic Bookshop:* 20 CHF

**R.91 (11/88)** General maintenance aspects for the maritime satellite telex service

*Individually through the Electronic Bookshop:* 20 CHF

Time-division multiplexing

**R.100 (03/93)** Transmission characteristics of international TDM links

4pp E 5206 F 5242 S 5278 8 CHF

**R.101 (03/93)** Code and speed dependent TDM system for anisochronous telegraph and data transmission using bit interleaving

14pp E 5300 F 5291 S 5314 11 CHF

**R.102 (03/93)** 4800 bit/s code and speed dependent and hybrid TDM systems for anisochronous telegraph and data transmission using bit interleaving

11pp E 5378 F 5377 S 5379 11 CHF

**R.103 (11/88)** Code and speed-dependent TDM 600 bit/s system for use in point-to-point or branch-line muldex configurations

*Individually through the Electronic Bookshop:* 20 CHF

**R.105 (03/93)** 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

3pp E 5182 F 5233 S 5268 8 CHF

**R.106 (08/95)** Muldex unit for telegraph and low speed data transmission using TDM bit interleaving with an aggregate bit rate higher than 4800 bit/s

8pp E 6353 F 6354 S 6355 8 CHF

**R.111 (03/93)** Code and speed independent TDM system for anisochronous telegraph and data transmission

9pp E 5187 F 5236 S 5271 11 CHF

**R.112 (03/93)** TDM hybrid system for anisochronous telegraph and data transmission using bit interleaving

3pp E 5176 F 5230 S 5265 8 CHF

**R.113 (03/93)** Combined muldex for telegraphy and synchronous data transmission

5pp E 5178 F 5231 S 5266 8 CHF

**R.114 (03/93)** Numbering of international TDM channels

3pp E 5101 F 5100 S 5102 8 CHF

ITU-T 02/03 - Series R

**R.115 (03/93)** Maintenance loops for TDM-systems 7pp E 5172 F 5227 S 5262 11 CHF

**R.116 (11/88)** Maintenance tests to be carried out on international TDM systems

Individually through the Electronic Bookshop: 20 CHF

**R.117 (03/93)** End-to-end error performance for telegraph, telex and gentex connections involving regenerative equipment

4pp E 5104 F 5103 S 5105 8 CHF

**R.118 (03/93)** Performance and availability monitoring in regenerative TDM

1pp E 4665 F 4664 S 4666 8 CHF

Transmission quality above 50 bauds

**R.120 (11/88)** Tolerable limits for the degree of isochronous distortion of code-independent telegraph circuits operating at modulation rates of 75, 100 and 200 bauds

*Individually through the Electronic Bookshop:* 20 CHF

**R.121 (11/88)** Standard limits of transmission quality for start-stop user classes of service 1 and 2 on anisochronous data networks

*Individually through the Electronic Bookshop:* 20 CHF

**R.122 (11/88)** Summary of transmission plans for rates up to 300 bauds

*Individually through the Electronic Bookshop:* 20 CHF

**Definitions** 

**R.140 (11/88)** Definitions of essential technical terms in the field of telegraph transmission

*Individually through the Electronic Bookshop:* 20 CHF

Availability and reliability of international telegraph circuits

**R.150 (11/88)** Automatic protection switching of dual diversity bearers

*Individually through the Electronic Bookshop:* 20 CHF

## SERIES S

# **Telegraph services terminal equipment**

Start-stop terminals

**S.1 (03/93)** International Telegraph Alphabet No. 2 4pp E 4943 F 4942 S 4944 8 CHF **S.2 (11/88)** Coding scheme using International Telegraph Alphabet No. 2 (ITA2) to allow the transmission of capital and small letters

*Individually through the Electronic Bookshop:* 20 CHF

**S.3 (11/88)** Transmission characteristics of the local end with its termination (ITA2)

*Individually through the Electronic Bookshop:* 20 CHF

**S.4 (03/93)** Special use of certain characters of the International Telegraph Alphabet No. 2

4pp E 5014 F 5013 S 5015 8 CHF

**S.5 (11/88)** Standardization of page-printing start-stop equipment and cooperation between page-printing and tape-printing start-stop equipment (ITA2)

*Individually through the Electronic Bookshop:* 20 CHF

**S.6 (11/88)** Characteristics of answerback units (ITA2)

*Individually through the Electronic Bookshop:* 20 CHF

S.7 (11/88) Control of teleprinter motors

*Individually through the Electronic Bookshop:* 20 CHF

**S.8 (03/93)** Intercontinental standardization of the modulation rate of start-stop apparatus and of the use of combination No. 4 in figure-shift

1pp E 4626 F 4625 S 4627 8 CHF

**S.9 (11/88)** Switching equipment of start-stop apparatus

*Individually through the Electronic Bookshop:* 20 CHF

**S.10 (11/88)** Transmission at reduced character transfer rate over a standardized 50-baud telegraph channel

*Individually through the Electronic Bookshop:* 20 CHF

**S.11 (11/88)** Use of start-stop reperforating equipment for perforated tape retransmission

*Individually through the Electronic Bookshop:* 20 CHF

**S.12 (11/88)** Conditions that must be satisfied by synchronous systems operating in connection with standard 50-baud teleprinter circuits

Individually through the Electronic Bookshop: 20 CHF

**S.13 (11/88)** Use on radio circuits of 7-unit synchronous systems giving error correction by automatic repetition

*Individually through the Electronic Bookshop:* 20 CHF

**S.14 (11/88)** Suppression of unwanted reception in radiotelegraph multi-destination teleprinter systems

*Individually through the Electronic Bookshop:* 20 CHF

**S.15 (11/88)** Use of the telex network for data transmission at 50 bauds

Individually through the Electronic Bookshop: 20 CHF

**S.16 (03/93)** Connection to the telex network of an automatic terminal using a V.24 DCE/DTE interface

11pp E 5089 F 5088 S 5090 11 CHF

S.17 (11/88) Answer-back unit simulators

Individually through the Electronic Bookshop: 20 CHF

**S.18 (11/88)** Conversion between International Telegraph Alphabet No. 2 and International Alphabet No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**S.19 (11/88)** Calling and answering in the telex network with automatic terminal equipment

*Individually through the Electronic Bookshop:* 20 CHF

**S.20 (03/93)** Automatic clearing procedure for a telex terminal

2pp E 4605 F 4604 S 4606 8 CHF

**S.21 (03/93)** Use of display screens in telex machines

2pp E 4608 F 4607 S 4609 8 C

**S.22 (03/93)** "Conversation impossible" and or pre-recorded message in response to J/BELL signals from a telex terminal

2pp E 4644 F 4643 S 4645 8 CHF

**S.23 (03/93)** 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

2pp E 4623 F 4622 S 4624 8 CHF

**S.30 (11/88)** Standardization of basic model page-printing machine using International Alphabet No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**S.31 (11/88)** Transmission characteristics for start-stop data terminal equipment using International Alphabet No. 5

*Individually through the Electronic Bookshop:* 20 CHF

**S.32 (11/88)** Answer-back units for 200- and 300-baud start-stop machines in accordance with Recommendation S.30

Individually through the Electronic Bookshop: 20 CHF

**S.33 (03/93)** Alphabets and presentation characteristics for the intex service

5pp E 5038 F 5037 S 5039 8 CHF

**S.34 (03/93)** Intex terminals – Requirements to effect interworking with the international telex service

3pp E 4528 F 4527 S 4529 8 CHF

S.35 (03/93) Answerback coding for the Intex service

3pp E 4713 F 4712 S 4714 8 CHF

**S.36 (07/96)** INTEX and similar services – Terminal requirements to effect interworking between terminals operating at different speeds

4pp E 7459 F 7460 S 7461 9 CHF

**Definitions** 

**S.140 (11/88)** Definitions of essential technical terms relating to apparatus for alphabetic telegraphy

*Individually through the Electronic Bookshop:* 20 CHF

## **Supplements to the Series S Recommendations**

**Suppl. 1 (11/88)** Minimal specifications for the bilingual (arabic/latin) teleprinter

## SERIES T

## **Terminals for telematic services**

**T.0 (07/96)** Classification of facsimile terminals for document transmission over the public networks

4pp E 7099 F 7100 S 7101 9 CHF

**T.1 (11/88)** Standardization of phototelegraph apparatus

*Individually through the Electronic Bookshop:* 20 CHF

## T.2 (11/88) Withdrawn (07/96)

Standardization of Group 1 facsimile apparatus for document transmission

Withdrawn in 07/1996 in recognition of the fact that Group 1 stand-alone terminals had not been manufactured for many years and that Group 3 facsimile terminals were the only type being used on the PSTN

*Individually through the Electronic Bookshop:* 20 CHF

## **T.3** (11/88) Withdrawn (07/96)

Standardization of Group 2 facsimile apparatus for document transmission

Withdrawn in 07/1996 in recognition of the fact that Group 2 stand-alone terminals had not been manufactured for many years and that Group 3 facsimile terminals were the only type being used on the PSTN

Individually through the Electronic Bookshop: 20 CHF

**T.4 (04/99)** Standardization of Group 3 facsimile terminals for document transmission

64pp E 17332 F 17333 S 17334 29 CHF

**T.4 Amendment 1 (02/00)** 

12pp E 18567 F 18568 S 18569 12 CHF

T.4 Amendment 2 (11/00) Amendment 2

8pp E 21552 F 21553 S 21554 9 CHF

**T.5 (02/98)** Test methodology for Group 3 facsimile processing equipment in the Public Switched Telephone Network

This text was first approved and published as ITU-T Rec. G.511, and then renumbered as T.5 on 2002-02-15 without further modification

To be published...

**T.6 (11/88)** Facsimile coding schemes and coding control functions for group 4 facsimile apparatus

Individually through the Electronic Bookshop: 20 CHF

**T.10 (11/88)** Document facsimile transmissions on leased telephone-type circuits

Individually through the Electronic Bookshop: 20 CHF

**T.10bis (11/88)** Document facsimile transmissions in the general switched telephone network

*Individually through the Electronic Bookshop:* 20 CHF

## T.11 (11/88) Withdrawn (10/96)

Phototelegraph transmissions on telephone-type circuit

This Recommendation was also included but not published in H series under alias number H.41. It was deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

## T.12 (11/88) Withdrawn (10/96)

Range of phototelegraph transmissions on a telephone-type circuit

This Recommendation was also included but not published in H series under alias number H.42. It was deleted after its content became technically out of date

*Individually through the Electronic Bookshop:* 20 CHF

## T.15 (11/88) Withdrawn (10/96)

Phototelegraph transmission over combined radio and metallic circuits

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

## T.20 (11/88) Withdrawn (01/95)

Standardized test chart for facsimile transmissions

T.20 and T.21 are superseded by ITU-T T.22, and the test charts 1, 2 and 3 they described are replaced by test charts 4 and 5 of T.22

Individually through the Electronic Bookshop: 20 CHF

#### T.21 (11/88) Withdrawn (01/95)

Standardized test charts for document facsimile transmissions

T.20 and T.21 are superseded by ITU-T T.22, and the test charts 1, 2 and 3 they described are replaced by test charts 4 and 5 of T.22

*Individually through the Electronic Bookshop:* 20 CHF

## **T.22 (03/93)** Standardized test charts for document facsimile transmissions

Figures reproducing test charts in T.22 Annex A are not suited for measurements. Original test charts are available from ITU sales department.

9pp E 4002 F 4001 S 4003 11 CHF

## **T.23 (04/94)** Standardized colour test chart for document facsimile transmissions

Figure reproducing test charts in T.23 Annex A is not suited for measurements. Original test chart is available from ITU sales department.

7pp E 5591 F 5590 S 5592 11 CHF

## T.24 (06/98) Standardized digitized image set

This Recommendation includes 2 CD-ROMs containing the digitized image set. Due to the data large volume, this Recommendation is not downloadable from the Electronic Bookshop and should be provided from ITU Sales department (Email Sales@itu.int). ITU-T Rec. T.24 text is downloadable free of charge for information purpose. The specimens reproduced inside this text are given for illustration purposes and are not suitable for measurements.62pp E 16670 F 16671 S 16672 154 CHF

## T.24 Amendment 1 (02/00)

To be published...

**T.30 (04/99)** Procedures for document facsimile transmission in the general switched telephone network

288pp E 17761 F 17762 S 17763 96 CHF

**T.30 Amendment 1 (02/00)** Amendment 1 (02/00) to Recommendation T.30

40pp E 20876 F 20877 S 20878 22 CHF

T.30 Amendment 2 (11/00) Amendment 2

16pp E 21787 F 21788 S 21789 12 CHF

**T.30 Amendment 3 (03/01)** Procedures for document facsimile transmission in the general switched telephone network

4pp E 19564 F 19565 S 19566 9 CHF

**T.30 Amendment 4 (07/01)** Procedure for document facsimile transmission in the general switched telephone network

8pp E 20894 F 20895 S 20896 9 CHF

Available as a prepublished version					representations using lossless coding scheme for facsimile				
<b>T.31 (08/95</b> ) Service Cl	-	ronous fac	simile DCE	control –	16pp	E 11629	F 11630	S 11631	12 CHF
23pp E 6324 F 6325 S 6326 15 CHF					<b>T.43 Amendment 1 (02/00)</b> Accommodation of new and future Resolutions				
T.31 Ameno Service Cl				cedure for	8pp	E 18365	F 18366	S 18367	9 CHF
20pp	E 7493	F 7494	S 7495	17 CHF	T.44 (04/99)	) Mixed	raster conto	ent (MRC)	
<b>T.32 (08/95</b> ) Service Cl		ronous fac	simile DCE	control –	40pp <b>T.44 Amen</b> e	E 16549		S 16551	22 CHF
Covering Note 30.10.1997: Corrigendum					Annex B	ament i (	02/00) A	ccommodati	on or new
80pp	E 6489	F 6490	S 6491	30 CHF	28pp	E 18434	F 18435	S 18436	17 CHF
T.32 Ameno	dment 1 (0	7/96)			T.45 (02/00) Run-length colour encoding				
8pp	E 7436	F 7437	S 7438	9 CHF	8pp	E 18362	F 18363	S 18364	9 CHF
T.33 (07/96) Facsimile routing utilizing the Subaddress					<b>T.50 (09/92)</b> International Reference Alphabet (IRA) (Formerly International Alphabet No. 5 or IA5) – Information technology – 7-bit coded character set				
16pp	E 7462	F 7463	S 7464	12 CHF	for inform				
T.35 (02/00) defined co	Procedu des for not			f ITU-T	20pp	E 3177	F 3176	S 3178	15 CHF
12pp	E 18405	F 18406	S 18407	12 CHF	<b>T.51 (09/92)</b> telematic	•	ased coded	l character so	ets for
<b>T.36 (07/97)</b> 3 facsimile	Security e terminals		ies for use w	ith Group	26pp	E 3224	F 3223	S 3225	15 CHF
40pp	E 11638	F 11639	S 11640	22 CHF	T.51 Amen	`			
T.36 Ameno	dment 1 (0	(4/99)			8pp	E 6603	F 6604	S 6605	8 CHF
8pp E 16147 F 16148 S 16149 9 CHF					<b>T.52 (03/93)</b> Non-latin coded character sets for telematic services				
<b>T.37 (06/98)</b> data via st			transfer of he Internet	facsimile	88pp	E 4416	F 4415	S 4417	33 CHF
12pp	E 13917	F 13918	S 13919	12 CHF	T.52 Amen	dment 1 (1	10/96)		
T.37 Ameno	dment 1 (0	<b>19/99)</b> Fu	ıll Mode		8pp	E 10633	F 10634	S 10635	9 CHF
60pp	`	F 17745	S 17746	29 CHF	<b>T.53 (04/94)</b> Character coded control functions for telematic services				
T.37 Ameno	dment 2 (0	3/01)			68pp	E 5462	F 5461	S 5463	29 CHF
8pp	E 19555	F 19556	S 19557	9 CHF	T.60 (03/93	) With	drawn (05	:/00 <b>)</b>	
T.37 Ameno	dment 3 (1	1/02)			T.60 (03/93) Withdrawn (05/00) Terminal equipment for use in the teletex service				
7pp	E 23082	F 23083	S 23084	9 CHF	Deleted as service	a conseque	nce of the su	ippression of	Teletex
<b>T.38 (03/02)</b> Procedures for real-time Group 3 facsimile communication over IP networks					21pp	E 5594	F 5593	S 5595	15 CHF
78pp E 22572 F 22573 S 22574 34 CHF					T.61 (03/93) Withdrawn (08/95)  Character repertoire and coded character sets for the international teletex service				
<b>T.39 (10/97)</b> Application profiles for simultaneous voice and facsimile terminals				Never published. Deleted as a consequence of the					
16pp	E 12674	F 12675	S 12676	12 CHF	suppression			4	
<b>T.42</b> (10/96) method fo			colour repres	sentation	<b>T.62 (03/93)</b> Control procedures for teletex and Group 4 facsimile services				
12pp	E 10657	F 10658	S 10659	12 CHF	163pp	E 5597	F 5596	S 5598	65 CHF

T.43 (07/97) Colour and gray-scale image

ITU-T 02/03 - Series T

133

T.30 Corrigendum 1 (07/01)

**T.62 bis (03/93)** Control procedures for teletex and G4 facsimile services based on Recommendations X.215 and X.225

30pp E 5526 F 5525 S 5527 15 CHF

#### T.63 (03/93) Withdrawn (05/00)

Provisions for verification of teletex terminal compliance

Deleted as a consequence of the suppression of Teletex service

21pp E 5170 F 5226 S 5261 15 CHF

## T.64 (03/93) Withdrawn (05/00)

Conformance testing procedures for the teletex Recommendations

Deleted as a consequence of the suppression of Teletex service

123pp E 5391 F 5390 S 5392 42 CHF

#### T.65 (11/88) Withdrawn (07/99)

Applicability of telematic protocols and terminal characteristics to computerized communication terminals (CCTs)

This Recommendation was deleted in 07/1999 as it was no longer applicable due to changes in technology

*Individually through the Electronic Bookshop:* 20 CHF

**T.66 (03/02)** Facsimile code points for use with Recommendations V.8 and V.8 bis

14pp E 22239 F 22240 S 22241 12 CHF

**T.70 (03/93)** Network-independent basic transport service for the telematic services

57pp E 5417 F 5416 S 5418 24 CHF

**T.71 (11/88)** Link access protocol balanced (LAPB) extended for half-duplex physical level facility

*Individually through the Electronic Bookshop:* 20 CHF

**T.80 (09/92)** Common components for image compression and communication – Basic principles

11pp E 3435 F 3434 S 3436 11 CHF

**T.81 (09/92)** Information technology – Digital compression and coding of continuous-tone still images – Requirements and guidelines

Common text with ISO/IEC

182pp E 4466 F 5222 S 5257 61 CHF

**T.82 (03/93)** Information technology – Coded representation of picture and audio information – Progressive bi-level image compression

Common text with ISO/IEC

71pp E 4467 F 5239 S 5275 29 CHF

T.82 (1993) Technical Cor.1 (03/95)

T.82 (1993) Technical Cor.2 (03/01)

**T.83 (11/94)** Information technology – Digital compression and coding of continuous-tone still images: Compliance testing

Common text with ISO/IEC

This Recommendation includes 3 diskettes containing compliance test data for the generic encoder and decoder compliance tests.

64pp E 10229 F 10230 S 10231 99 CHF

**T.84 (07/96)** Information technology – Digital compression and coding of continuous-tone still images: Extensions

Common text with ISO/IEC

84pp E 7496 F 7497 S 7498 39 CHF

**T.84 Amendment 1 (04/99)** Provisions to allow registration of new compression types and versions in the SPIFF header

Common text with ISO/IEC

8pp E 16033 F 16034 S 16035 9 CHF

**T.85 (08/95)** Application profile for Recommendation T.82 – Progressive bi-level image

compression (JBIG coding scheme) for facsimile apparatus

3pp E 6281 F 6282 S 6283 8 CHF

T.85 Amendment 1 (10/96)

8pp E 10860 F 10861 S 10862 9 CHF

## T.85 Amendment 2 (10/97)

Covering note: 7 February 2000: French, Spanish only.

8pp E 12391 F 12392 S 12393 9 CHF

## T.85 Corrigendum 1 (02/97)

T.86 (06/98) 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)

Common text with ISO/IEC

Covering note, February 1999: Corrigendum

36pp E 14023 F 14024 S 14025 17 CHF

**T.87 (06/98)** Information Technology – Lossless and near-lossless compression of continuous-tone still images – Baseline

Common text with ISO/IEC

This Recommendation includes one diskette containing the JPEG-LS Lossless and near-lossless image compression reference implementation and a conformance testing image set.

72pp E 15804 F 15805 S 15806 74 CHF

<b>T.88 (02/00)</b> Information technology – Coded representation of picture and audio information – Lossy/lossless coding of bi-level images					T.120 (07/96) Data protocols for multimedia conferencing  24pp E 7406 F 7407 S 7408 17 CHF
165pp		F 18593	S 18594	73 CHF	T.120 Annex C (02/98) Lightweight profiles for the
<b>T.89 (09/01)</b> Application profiles for Recommendation T.88 – Lossy/lossless coding of					T.120 architecture 24pp E 13525 F 13526 S 13527 17 CHF
bi-level in	nages (JBI) E 22191			12 CHE	T.121 (07/96) Generic application template
24pp		F 22192	S 22193	12 CHF	44pp E 9551 F 9552 S 9553 22 CHF
T.90 (02/92) terminals				for	<b>T.122 (02/98)</b> Multipoint communication service – Service definition
58pp	E 2809	F 2771	S 2844	24 CHF	44pp E 13400 F 13401 S 13402 22 CHF
<b>T.90 Amendment 1 (11/94)</b> Characteristics and protocols for terminals for telematic services in ISDN					<b>T.123 (05/99)</b> Network-specific data protocol stacks for multimedia conferencing  76pp E 16845 F 16846 S 16847 34 CHF
18pp	E 5686	F 5685	S 5687	15 CHF	<b>T.124 (02/98)</b> Generic Conference Control 212pp E 13979 F 13980 S 13981 96 CHF
T.90 Ameno	,	<b>17/96)</b>			T.125 (02/98) Multipoint communication service
8pp	E 7341	F 7342	S 7343	9 CHF	protocol specification
T.90 Ameno	,	06/98) Ca	ause value fo	or a G4	144pp E 13784 F 13785 S 13786 55 CHF
8рр	E 13604	F 13605	S 13606	17 CHF	<b>T.126 (07/97)</b> Multipoint still image and annotation protocol
T.100 (11/8		ational info	ormation exc	change for	132pp E 12251 F 12252 S 12253 55 CHF
interactive		e Electroni	c Bookshop:	22 CHF	<b>T.127 (08/95)</b> Multipoint binary file transfer protocol 60pp E 6432 F 6433 S 6434 25 CHF
·					T.128 (02/98) Multipoint application sharing
<b>T.101 (11/9</b> 4 services	4) Interna	ational inte	erworking fo	r videotex	216pp E 13727 F 13728 S 13729 96 CHF
826pp	E 6251	F 6252	S 6253	248 CHF	<b>T.134 (02/98)</b> Text chat application entity 16pp E 13015 F 13016 S 13017 12 CHF
<b>T.102 (03/93)</b> Syntax-based videotex end-to-end protocols for the circuit mode ISDN					<b>T.135 (02/98)</b> User-to-reservation system
6рр	E 5116	F 5115	S 5117	8 CHF	transactions within T.120 conferences 76pp E 13237 F 13239 S 13240 34 CHF
T.103 (03/93) Syntax-based videotex end-to-end					T.136 (05/99) Remote device control application
protocols	for the pac E 5414	ket mode I F 5413	SDN S 5415	29 CHF	protocol
60pp					12pp E 16546 F 16547 S 16548 12 CHF
<b>T.104 (03/93)</b> Packet mode access for syntax-based videotex via PSTN					T.137 (02/00) Virtual meeting room management – services and protocol
13pp	E 5155	F 5219	S 5254	11 CHF	140pp E 18730 F 18731 S 18732 55 CHF
<b>T.105 (11/94)</b> Syntax-based videotex application layer protocol					<b>T.140 (02/98)</b> Protocol for multimedia application text conversation
85pp	E 5689	F 5688	S 5690	34 CHF	16pp E 13315 F 13316 S 13317 12 CHF
T.106 (03/93) Framework of videotex terminal protocols					<b>T.140 Addendum 1 (02/00)</b> Addendum 1 10pp E 18739 F 18740 S 18741 9 CHF
3pp	E 5209	F 5244	S 5280	8 CHF	<b>T.150 (11/88)</b> Telewriting terminal equipment <i>Individually through the Electronic Bookshop:</i> 29 CHF
<b>T.107 (08/95)</b> Enhanced man machine interface for videotex and other retrieval services (VEMMI)					<b>T.170 (02/98)</b> Framework of the T.170-Series of
128pp	E 6650	F 6651	S 6652	44 CHF	Recommendations           8pp         E 12860         F 12861         S 12862         9 CHF

ITU-T 02/03 - Series T 135

**T.171 (10/96)** Protocols for interactive audiovisual services: coded representation of multimedia and hypermedia objects

332pp E 11036 F 11037 S 11038 124 CHF

**T.172 (02/98)** MHEG-5 – Support for base-level interactive applications

236pp E 13389 F 13390 S 13391 96 CHF

**T.173 (07/97)** MHEG-3 script interchange representation

148pp E 12296 F 12297 S 12298 61 CHF

**T.174 (10/96)** Application programming interface (API) for MHEG-1

192pp E 11096 F 11097 S 11098 73 CHF

**T.175 (02/98)** Application Programming Interface (API) for MHEG-5

32pp E 12851 F 12852 S 12853 17 CHF

**T.176 (02/98)** Application Programming Interface (API) for Digital Storage Media Command and Control (DSM-CC)

16pp E 12854 F 12855 S 12856 12 CHF

**T.180 (06/98)** Homogeneous access mechanism to communication services

332pp E 14561 F 14562 S 14563 124 CHF

**T.190 (08/95)** Cooperative document handling (CDH) – Framework and basic services

76pp E 6834 F 6835 S 6836 34 CHF

**T.191 (07/96)** Cooperative document handling (CDH) – Joint synchronous editing (point-to-point)

32pp E 9577 F 9578 S 9579 17 CHF

**T.192 (06/98)** Cooperative Document Handling – Complex services: Joint synchronous editing and joint document presentation/viewing

60pp E 13892 F 13893 S 13894 29 CHF

## T.200 (10/96) Withdrawn (07/99)

Programmable communication interface for terminal equipment connected to ISDN

This Recommendation had been approved at the WTSC 1996. In its Appendix, it describes one of the programmable communication interfaces which were available on the market at that time. Although such an interface does not affect the communication between networks but is rather a matter for implementation at a local computer (e.g. PC), the related study Question had been accepted at the WTSC-96 to promote computer communication via the ISDN, and thus the growth of the ISDNs. After 1996,the quick market development made further studies in the ITU-T obsolete. ITU-T came to the conclusion that it would be appropriate to delete T.200 in order to avoid any further maintenance work which might bind resources unnecessarily

348pp E 11182 F 11183 S 11184 124 CHF

**T.300 (11/88)** General principles of telematic interworking

*Individually through the Electronic Bookshop:* 20 CHF

**T.330 (11/88)** Telematic access to interpersonal messaging system

*Individually through the Electronic Bookshop:* 39 CHF

**T.351 (11/88)** Imaging process of character information on facsimile apparatus

Individually through the Electronic Bookshop: 20 CHF

**T.390 (11/88)** Teletex requirements for interworking with the telex service

*Individually through the Electronic Bookshop:* 20 CHF

## T.400 (11/88) Withdrawn (10/96)

Introduction to document architecture, transfer and manipulation

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

T.411 (03/93) Information technology – Open Document Architecture (ODA) and interchange format: Introduction and general principles Common text with ISO/IEC

77pp E 5193 F 11783 S 11784 33 CHF

## T.411 (1993) Technical Cor. 1 (10/97)

T.412 (03/93) Information technology – Open Document Architecture (ODA) and interchange format: Document structures
Common text with ISO/IEC
260pp E 5605 F 5935 S 5706 91 CHF

T.412 (1993) Technical Cor. 1 (10/97)

T.412 (1993) Technical Cor. 2 (10/97)

**T.413 (11/94)** Information technology – Open Document Architecture (ODA) and interchange format: Abstract interface for the manipulation of ODA documents

Common text with ISO/IEC

24pp E 5936 F 6732 S 6719 15 CHF

**T.414 (03/93)** Information technology – Open Document Architecture (ODA) and interchange format: Document profile

Common text with ISO/IEC

31pp E 5141 F 5638 S 5637 20 CHF

T.414 (1993) Technical Cor. 1 (10/97)

## T.414 (1993) Technical Cor. 2 (10/97)

**T.415 (03/93)** Information technology – Open Document Architecture (ODA) and interchange format: Open Document Interchange Format (ODIF) Common text with ISO/IEC

103pp E 5144 F 5937 S 5938 38 CHF

T.415 (1993) Technical Cor. 1 (10/97) T.432 (09/92) Document Transfer And Manipulation (DTAM) - Services and protocols - Service T.415 (1993) Technical Cor. 2 (10/97) definition 36pp E 3513 F 3512 S 3514 20 CHF T.416 (03/93) Information technology – Open Document Architecture (ODA) and interchange **T.432 Amendment 1 (08/95)** Revisions of T.432 to format: Character content architectures support G4 colour and file transfer Common text with ISO/IEC E 6362 F 6363 S 6364 3pp 8 CHF E 5389 29 CHF F 5982 S 5707 68pp **T.433 (09/92)** Document Transfer And Manipulation T.416 (1993) Technical Cor. 1 (10/97) (DTAM) - Services and protocols - Protocol specification T.417 (03/93) Information technology – Open Document Architecture (ODA) and interchange 82pp E 3652 F 3651 S 3653 33 CHF format: Raster graphics content architectures **T.433 Amendment 1 (08/95)** Revisions of T.433 to Common text with ISO/IEC support G4 colour and file transfer E 5083 F 5635 S 5636 20 CHF 48pp E 6303 5pp F 6304 S 6305 8 CHF **T.417 Amendment 1 (10/97)** T.434 (04/99) Binary file transfer format for the E 12725 F 12726 17 CHF S 12727 20pp telematic services T.417 Amendment 2 (02/00) Amendment 2 24pp E 17281 F 17282 S 17283 17 CHF Common text with ISO/IEC T.435 (08/95) Document Transfer And Manipulation E 17998 F 17999 S 18000 9 CHF (DTAM) – Services and protocols – Abstract service definition and procedures for confirmed document T.417 (1993) Technical Cor. 1 (10/97) manipulation **T.418 (03/93)** Information technology – Open 64pp E 6683 F 6684 S 6685 25 CHF Document Architecture (ODA) and interchange format: Geometric graphics content architecture T.436 (08/95) Document Transfer And Manipulation Common text with ISO/IEC (DTAM) - Services and protocols - Protocol 44pp E 5084 F 5639 S 5708 20 CHF specifications for confirmed document manipulation 12pp E 6597 F 6598 S 6599 11 CHF T.419 (08/95) Information technology – Open Document Architecture (ODA) and interchange T.441 (11/88) Document Transfer And Manipulation format: Audio content architectures (DTAM) – Operational structure Common text with ISO/IEC Individually through the Electronic Bookshop: 20 CHF 32pp E 6742 F 9877 S 9878 17 CHF **T.501 (03/93)** Document application profile MM for **T.421 (11/94)** Information technology – Open the interchange of formatted mixed mode documents Document Architecture (ODA) and interchange E 5532 F 5531 S 5533 21pp 15 CHF format: Tabular structures and tabular layout Common text with ISO/IEC **T.502 (11/94)** Document application profile PM-11 129pp E 6028 F 7012 S 7013 49 CHF for the interchange of simple structure, character content documents in processable and formatted T.422 (08/95) Information technology – Open forms Document Architecture (ODA) and interchange 52pp E 5692 F 5691 S 5693 25 CHF format – Identification of document fragments Common text with ISO/IEC **T.503 (02/00)** A document application profile for the E 6357 F 6746 S 6724 15 CHF 32pp interchange of Group 4 facsimile documents E 19106 F 19107 S 19108 22 CHF **T.424 (07/96)** Information technology – Open Document Architecture (ODA) and interchange T.504 (03/93) Document application profile for format: Temporal relationships and non-linear

structures

general principles

56pp

14pp

Common text with ISO/IEC E 9634

E 3483

F 9635

T.431 (09/92) Document Transfer And Manipulation

(DTAM) – Services and protocols – Introduction and

F 3482

S 9636

S 3484

**29 CHF** 

11 CHF

100pp E 6080 F 6079 S 6081 39 CHF

F 5293

**T.505 (11/94)** Document application profile PM-26 for the interchange of enhanced structure, mixed

content documents in processable and formatted

videotex interworking

E 5306

7pp

forms

S 5316

11 CHF

**T.506 (08/93)** Document application profile PM-36 for the interchange of extended document structures and mixed content documents in processable and formatted forms

180pp E 5607 F 5606 S 5608 65 CHF

**T.510 (03/93)** General overview of the T.510-Series Recommendations

12pp E 5298 F 5289 S 5312 11 CHF

**T.521 (11/94)** Communication application profile BT0 for document bulk transfer based on the session service

15pp E 5940 F 5939 S 5941 15 CHF

**T.521 Amendment 1 (08/95)** Communication application profile BT0 for document bulk transfer based on the session service – Amendment 1

3pp E 6300 F 6301 S 6302 8 CHF

**T.522 (09/92)** Communication application profile BT1 for document bulk transfer

5pp E 3319 F 3318 S 3320 8 CHF

**T.523 (03/93)** Communication application profile DM-1 for videotex interworking

19pp E 5381 F 5380 S 5382 15 CHF

**T.541 (03/93)** Operational application profile for videotex interworking

21pp E 5305 F 5292 S 5315 15 CHF

**T.561 (11/88)** Terminal characteristics for mixed mode of operation MM

Individually through the Electronic Bookshop: 20 CHF

**T.562 (11/88)** Terminal characteristics for teletex processable mode PM.1

Individually through the Electronic Bookshop: 20 CHF

**T.563 (10/96)** Terminal characteristics for Group 4 facsimile apparatus

28pp E 11039 F 11040 S 11041 17 CHF

T.563 Amendment 1 (07/97)

8pp E 11230 F 11231 S 11232 9 CHF

**T.563 Amendment 2 (10/97)** Annex C – T.30 frames for G4 facsimile

8pp E 12502 F 12503 S 12504 9 CHF

T.563 Amendment 3 (04/99)

8pp E 16223 F 16224 S 16225 9 CHF

T.563 Corrigendum 1 (06/98)

**T.564 (03/93)** Gateway characteristics for videotex interworking

30pp E 5538 F 5537 S 5539 15 CHF

**T.571 (09/92)** Terminal characteristics for the telematic file transfer within the teletex service

11pp E 3552 F 3551 S 3553 11 CHF

**T.611 (11/94)** Programming Communication Interface (PCI) APPLI/COM for facsimile Group 3, facsimile Group 4, teletex, telex, E-mail and file transfer services

228pp E 6047 F 6046 S 6048 75 CHF

**T.800 (08/02)** Information technology – JPEG 2000 image coding system: Core coding system

To be published...

**T.801 (08/02)** Information technology – JPEG 2000 image coding system: Extensions

To be published...

**T.803 (11/02)** Information technology – JPEG 2000 image coding system: Conformance testing

To be published...

**T.804 (08/02)** Information technology – JPEG 2000 image coding system: Reference software

**T.870 (03/02)** Information technology – Lossless and near-lossless compression of continuous-tone still images: Extensions

This Recommendation includes an electronic attachment containing the data set used for implementing the JPEG-LS T.870 extension conformance test

66pp E 22287 79 CHF

## SERIES U

## **Telegraph switching**

General

**U.1 (03/93)** Signalling conditions to be applied in the international telex service

11pp E 4970 F 4969 S 4971 11 CHF

**U.2 (11/88)** Standardization of dials and dial pulse generators for the international telex service

*Individually through the Electronic Bookshop:* 20 CHF

**U.3 (11/88)** Arrangements in switching equipment to minimize the effects of false calling signals

Individually through the Electronic Bookshop: 20 CHF

**U.4 (11/88)** Exchange of information regarding signals destined to be used over international circuits concerned with switched teleprinter networks

*Individually through the Electronic Bookshop:* 20 CHF

**U.5 (11/88)** Requirements to be met by regenerative repeaters in international connections

*Individually through the Electronic Bookshop:* 20 CHF

**U.6 (11/88)** Prevention of fraudulent transit traffic in the fully automatic international telex service

*Individually through the Electronic Bookshop:* 20 CHF

**U.7 (03/93)** Numbering schemes for automatic switching networks

1pp E 4569 F 4568 S 4570 8 CHF

**U.8 (11/88)** Hypothetical reference connections for telex and gentex networks

*Individually through the Electronic Bookshop:* 20 CHF

**U.10 (03/93)** Equipment of an international telex position

1pp E 4614 F 4613 S 4615 8 CHF

Specific signalling schemes and interworking between signalling systems

**U.11 (03/93)** Telex and gentex signalling on intercontinental circuits used for intercontinental automatic transit traffic (type c signalling)

15pp E 4973 F 4972 S 4974 11 CHF

U.12 (03/93) Terminal and transit control signalling system for telex and similar services on international circuits (type D signalling)

24pp E 5184 F 5234 S 5269 15 CHF

U.15 (03/93) Interworking rules for international signalling systems according to Recommendations U.1, U.11 and U.12

8pp E 5107 F 5106 S 5108 8 CHF

## Signalling over radio and multiplexed channels

**U.20 (11/88)** Telex and gentex signalling on radio channels (synchronous 7-unit systems affording error correction by automatic repetition)

Individually through the Electronic Bookshop: 20 CHF

**U.21 (11/88)** Operator recall on a telex call set up on a radiotelegraph circuit

Individually through the Electronic Bookshop: 20 CHF

U.22 (11/88) Signals indicating delay in transmission on calls set up by means of synchronous systems with automatic error correction by repetition

Individually through the Electronic Bookshop: 20 CHF

U.23 (11/88) Use of radiotelegraph circuits with ARQ equipment for fully automatic telex calls charged on the basis of elapsed time

*Individually through the Electronic Bookshop:* 20 CHF

**U.24 (11/88)** Requirements for telex and gentex operation to be met by synchronous multiplex equipment described in Recommendation R.44

Individually through the Electronic Bookshop: 20 CHF

U.25 (11/88) Requirements for telex and gentex operation to be met by code- and speed-dependent TDM systems conforming to Recommendation R.101

*Individually through the Electronic Bookshop:* 20 CHF

#### Gentex signalling

**U.30 (11/88)** Signalling conditions for use in the international gentex network

*Individually through the Electronic Bookshop:* 20 CHF

**U.31 (11/88)** Prevention of connection to faulty stations and/or station lines in the gentex service

*Individually through the Electronic Bookshop:* 20 CHF

## Particular signalling facilities

**U.40 (03/93)** Reactions by automatic terminals connected to the telex network in the event of ineffective call attempts or signalling incidents

4pp E 4976 F 4975 S 4977 8 CHF

**U.41 (11/88)** changed address interception and call redirection in the telex service

*Individually through the Electronic Bookshop:* 20 CHF

**U.43 (11/88)** Follow-on calls

Individually through the Electronic Bookshop: 20 CHF

**U.44 (11/88)** Multi-address calls in real time for broadcast purposes in the international telex service

Individually through the Electronic Bookshop: 20 CHF

**U.45 (03/93)** Response to the not-ready condition of the telex terminal

3pp E 4979 F 4978 S 4980 8 CHF

**U.46 (03/93)** Interruption of automatic transmission and flow control in the international telex service

2pp E 4249 F 4248 S 4250 8 CHF

## Radiotelex interworking

**U.60 (11/88)** General requirements to be met in interfacing the international telex network with maritime satellite systems

*Individually through the Electronic Bookshop:* 20 CHF

**U.61 (03/93)** Detailed requirements to be met in interfacing the international telex network with maritime satellite systems

10pp E 5086 F 5085 S 5087 11 CHF

**U.62 (03/93)** General requirements to be met in interfacing the international telex network with the fully automated maritime VHF/UHF radio system

5pp E 4566 F 4565 S 4567 8 CHF

**U.63 (11/88)** General requirements to be met in interfacing the international telex network with the maritime "direct printing" system

*Individually through the Electronic Bookshop:* 20 CHF

## *Interworking between new information services* and telex

U.70 (11/88) Telex service signals for telex to teletex interworking

Individually through the Electronic Bookshop: 20 CHF

**U.74 (11/88)** Extraction of telex selection information from a calling telex answerback

Individually through the Electronic Bookshop: 20 CHF

U.75 (03/93) Automatic called telex answerback check

3pp E 5119 F 5118 S 5120 8 CHF

## Telex store and forward

**U.80 (03/93)** International telex store and forward access from a telex subscriber

15pp E 5147 F 5214 S 5250 15 CHF

**U.81 (10/96)** International telex store-and-forward – Delivery to a telex subscriber

12pp E 11018 F 11019 S 11020 12 CHF

## Intex service

**U.101 (03/93)** Signalling systems for the Intex service (types E and F signalling)

27pp E 4982 F 4981 S 4983 15 CHF

**U.102 (07/96)** Intex and similar services – Network requirements to effect interworking between terminals operating at different speeds

8pp E 7465 F 7466 S 7467 9 CHF

## **Definitions**

**U.140 (11/88)** Definitions of essential technical terms relating to telegraph switching and signalling

*Individually through the Electronic Bookshop:* 20 CHF

#### The international telex service

**U.200 (03/93)** The international telex service – General technical requirements for interworking

17pp E 4901 F 4900 S 4902 15 CHF

**U.201 (03/93)** Interworking between the teletex service and the international telex service

17pp E 5148 F 5215 S 5251 15 CHF

**U.202 (03/93)** Technical requirements to be met in providing the international telex service within an integrated services digital network

This Recommendation is also included but not published in I series under alias number I.560

17pp E 5150 F 5216 S 5251 15 CHF

**U.203 (03/93)** 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

24pp E 5056 F 5055 S 5057 15 CHF

**U.204 (03/93)** Interworking between the international telex service and the public interpersonal messaging service

23pp E 5366 F 5365 S 5367 15 CHF

U.205 (03/93) 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

2pp E 4269 F 4268 S 4270 8 CHF

**U.206 (03/93)** Technical requirements for interworking between the international telex service and the videotex service

7pp E 4883 F 4882 S 4884 11 CHF

**U.207 (03/93)** 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

9pp E 4823 F 4822 S 4824 11 CHF

**U.208 (10/96)** The international telex service – Interworking with the INMARSAT C system using one-stage selection

12pp E 11021 F 11022 S 11023 12 CHF

**U.210 (03/93)** Intex service Network requirements to effect interworking with the international telex service

4pp E 4320 F 4319 S 4322 8 CHF

**U.220 (03/93)** The international telex service – Technical requirements for a status enquiry function in an interworking scenario

6pp E 4922 F 4921 S 4923 8 CHF

## SERIES V

# Data communication over the telephone network

## General

**V.1 (11/88)** Equivalence between binary notation symbols and the significant conditions of a two-condition code

*Individually through the Electronic Bookshop:* 20 CHF

**V.2 (11/88)** Power levels for data transmission over telephone lines

*Individually through the Electronic Bookshop:* 20 CHF

V.4 (11/88) General structure of signals of international alphabet No. 5 code for character oriented data transmission over public telephone networks

*Individually through the Electronic Bookshop:* 20 CHF

## V.5 (11/88) Withdrawn (03/93)

Standardization of data signalling rates for synchronous data transmission in the general switched telephone network

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

## V.6 (11/88) Withdrawn (03/93)

Standardization of data signalling rates for synchronous data transmission on leased telephone-type circuits

Deleted after its content became technically out of date
Individually through the Electronic Bookshop: 20 CHF

**V.7 (11/88)** Definitions of terms concerning data communication over the telephone network

*Individually through the Electronic Bookshop:* 20 CHF

**V.8 bis (11/00)** Procedures for the identification and selection of common modes of operation between data circuit-terminating equipments (DCEs) and between data terminal equipments (DTEs) over the public switched telephone network and on leased point-to-point telephone-type circuits

56pp E 20404 F 20405 S 20406 29 CHF

V.8 (11/00) Procedures for starting sessions of data transmission over the public switched telephone network

20pp E 19921 F 19922 S 19923 17 CHF

## Interfaces and voiceband modems

**V.10 (03/93)** Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates nominally up to 100 kbit/s

This Recommendation is also included but not published in X series under alias number X.26.

18pp E 4252 F 4251 S 4253 15 CHF

**V.11 (10/96)** Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s

This Recommendation is also included but not published in X series under alias number X.27

16pp E 10048 F 10049 S 10050 12 CHF

V.12 (08/95) Electrical characteristics for balanced double-current interchange circuits for interfaces with data signalling rates up to 52 Mbit/s

12pp E 6329 F 6330 S 6331 11 CHF

V.13 (03/93) Simulated carrier control

2pp E 3720 F 3719 S 3721 8 CHF

V.14 (03/93) Transmission of start-stop characters over synchronous bearer channels

4pp E 3971 F 3970 S 3972 8 CHF

## V.14 Corrigendum 1 (09/98)

V.15 (11/88) Use of acoustic coupling for data transmission

*Individually through the Electronic Bookshop:* 20 CHF

V.16 (11/88) Medical analogue data transmission modems

*Individually through the Electronic Bookshop:* 20 CHF

**V.17 (02/91)** A 2-wire modem for facsimile applications with rates up to 14 400 bit/s

11pp E 1960 F 1959 S 1961 10 CHF

## V.17 Corrigendum 1 (09/98)

**V.18 (11/00)** Operational and interworking requirements for DCEs operating in the text telephone mode

74pp E 20233 F 20234 S 20235 34 CHF

V.18 Amendment 1 (11/02)

7pp E 23076 F 23077 S 23078 9 CHF

V.19 (11/88) Modems for parallel data transmission using telephone signalling frequencies

Individually through the Electronic Bookshop: 20 CHF

## V.20 (11/88) Withdrawn (03/93)

Parallel data transmission modems standardized for universal use in the general switched telephone network

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

**V.21 (11/88)** 300 bits per second duplex modem standardized for use in the general switched telephone network

*Individually through the Electronic Bookshop:* 20 CHF

**V.22 (11/88)** 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

*Individually through the Electronic Bookshop:* 20 CHF

**V.22bis** (11/88) 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

*Individually through the Electronic Bookshop:* 20 CHF

**V.23 (11/88)** 600/1200-baud modem standardized for use in the general switched telephone network

*Individually through the Electronic Bookshop:* 20 CHF

V.24 (02/00) List of definitions for interchange circuits between data terminal equipment (DTE) and data circuit-terminating equipment (DCE)

24pp E 18630 F 18631 S 18632 17 CHF

**V.25bis** (10/96) Synchronous and asynchronous automatic dialling procedures on switched networks

28pp E 10124 F 10125 S 10226 17 CHF

V.25 (10/96) 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

12pp E 10112 F 10113 S 10114 12 CHF

## V.25 Corrigendum 1 (07/01)

Available as a prepublished version

V.26 (11/88) 2400 bits per second modem standardized for use on 4-wire leased telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**V.26bis (11/88)** 2400/1200 bits per second modem standardized for use in the general switched telephone network

*Individually through the Electronic Bookshop:* 20 CHF

V.26ter (11/88) 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

Individually through the Electronic Bookshop: 20 CHF

V.27ter (11/88) 4800/2400 bits per second modem standardized for use in the general switched telephone network

*Individually through the Electronic Bookshop:* 20 CHF

V.27 (11/88) 4800 bits per second modem with manual equalizer standardized for use on leased telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**V.27bis (11/88)** 4800/2400 bits per second modem with automatic equalizer standardized for use on leased telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**V.28 (03/93)** Electrical characteristics for unbalanced double-current interchange circuits

6pp E 3974 F 3973 S 3975 8 CHF

**V.29 (11/88)** 9600 bits per second modem standardized for use on point-to-point 4-wire leased telephone-type circuits

Individually through the Electronic Bookshop: 20 CHF

V.31bis (11/88) Electrical characteristics for single-current interchange circuits using optocouplers

*Individually through the Electronic Bookshop:* 20 CHF

V.31 (11/88) Electrical characteristics for single-current interchange circuits controlled by contact closure

*Individually through the Electronic Bookshop:* 20 CHF

V.32bis (02/91) 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

22pp E 1981 F 1980 S 1982 13 CHF

**V.32 (03/93)** 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

23pp E 4050 F 4049 S 4051 15 CHF

**V.33 (11/88)** 14 400 bits per second modem standardized for use on point-to-point 4-wire leased telephone-type circuits

Individually through the Electronic Bookshop: 20 CHF

V.34 (02/98) 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

76pp E 13500 F 13501 S 13502 34 CHF

Wideband modems

#### V.35 (10/84) Withdrawn (03/93)

Data transmission at 48 kbit/s using 60-108 kHz group band circuits

Deleted because the information contained in V.35 was out of date. Alternative techniques are described in ITU-T V.36 and V.37

*Individually through the Electronic Bookshop:* 20 CHF

**V.36 (11/88)** Modems for synchronous data transmission using 60-108 kHz group band circuits

*Individually through the Electronic Bookshop:* 20 CHF

V.37 (11/88) Synchronous data transmission at a data signalling rate higher than 72 kbit/s using 60-108 kHz group band circuits

*Individually through the Electronic Bookshop:* 20 CHF

V.38 (10/96) A 48/56/64 kbit/s data circuit-terminating equipment standardized for use on digital point-to-point leased circuits

20pp E 10127 F 10128 S 10129 17 CHF

Error control

#### V.40 (11/88) Withdrawn (03/93)

Error indication with electromechanical equipment

Deleted after its content became technically out of date

Individually through the Electronic Bookshop: 20 CHF

V.41 (11/88) Code-independent error-control system

*Individually through the Electronic Bookshop:* 20 CHF

**V.42bis (01/90)** Data compression procedures for data circuit-terminating equipment (DCE) using error correction procedures

27pp E 1757 F 1758 S 1759 10 CHF

V.42 (03/02) Error-correcting procedures for DCEs using asynchronous-to-synchronous conversion

70pp E 22467 F 22468 S 22469 34 CHF

V.43 (02/98) Data flow control

12pp E 13318 F 13319 S 13320 12 CHF

V.44 (11/00) Data compression procedures

64pp E 20450 F 20451 S 20452 29 CHF

V.44 Corrigendum 1 (03/02)

**V.44 Erratum (05/02)** Erratum to Recommendation ITU-T V.44 (2000) / Cor.1 (03/2002)

*Transmission quality and maintenance* 

V.50 (11/88) Standard limits for transmission quality of data transmission

*Individually through the Electronic Bookshop:* 20 CHF

**V.51 (11/88)** Organization of the maintenance of international telephone-type circuits used for data transmission

This Recommendation is published under alias number M.729.

*Individually through the Electronic Bookshop:* 20 CHF

#### V.52 (12/72) Withdrawn (11/88)

Characteristics of distortion and error-rate measuring apparatus for data transmission

Replaced by ITU-T O.153

*Individually through the Electronic Bookshop:* 20 CHF

V.53 (11/88) Limits for the maintenance of telephone-type circuits used for data transmission

Individually through the Electronic Bookshop: 20 CHF

#### V.54 (11/88) Withdrawn (11/88)

Loop test devices for modems

*Individually through the Electronic Bookshop:* 20 CHF

**V.55 (11/88)** Specification for an impulsive noise measuring instrument for telephone-type circuits

This Recommendation is published under alias number 0.71.

*Individually through the Electronic Bookshop:* 20 CHF

**V.56bis (08/95)** Network transmission model for evaluating modem performance over 2-wire voice grade connections

64pp E 6411 F 6412 S 6413 25 CHF

**V.56 (11/88)** Comparative tests of modems for use over telephone-type circuits

*Individually through the Electronic Bookshop:* 20 CHF

**V.56ter (08/96)** Test procedure for evaluation of 2-wire 4 kHz voiceband duplex modems

This Recommendation includes 2 diskettes containing the data files used for the voiceband duplex modems throughput tests.

76pp E 10818 F 10819 S 10820 89 CHF

#### V.57 (10/84) Withdrawn (11/88)

Comprehensive data test set for high data signalling rates

Replaced by ITU-T O.153

*Individually through the Electronic Bookshop:* 20 CHF

V.58 (09/94) Management information model for V-Series DCEs

58pp E 5495 F 5453 S 5454 24 CHF

V.59 (11/00) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

78pp E 20410 F 20411 S 20412 34 CHF

# V.59 Corrigendum 1 (07/01)

Available as a prepublished version

# V.59 Corrigendum 2 (03/02)

Simultaneous transmission of data and other signals

V.61 (08/96) 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 point-to-point 2-wire telephone type circuits

36pp E 9950 F 9951 S 9952 22 CHF

**V.70 (08/96)** 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

20pp E 9833 F 9834 S 9835 17 CHF

V.75 (08/96) DSVD terminal control procedures

24pp E 9836 F 9837 S 9838 17 CHF

**V.75 Appendix II (02/98)** Session establishment using V.75/H.245 procedures

12pp E 13403 F 13404 S 13405 12 CHF

V.76 (08/96) Generic multiplexer using V.42 LAPM-based procedures

56pp E 9839 F 9840 S 9841 29 CHF

V.80 (08/96) In-band DCE control and synchronous data modes for asynchronous DTE

36pp E 9953 F 9954 S 9955 22 CHF

V.80 Amendment 1 (07/01) ITU-T Amendment 1 (07/01) to Recommendation V.80 – In-Band DCE Control and Synchronous Data Modes for Asynchronous DTE

8pp E 20984 F 20985 S 20986 9 CHF

V.90 (09/98) 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

52pp E 14610 F 14611 S 14612 22 CHF

**V.91 (05/99)** 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

20pp E 16754 F 16755 S 16756 17 CHF

#### V.91 Corrigendum 1 (07/01)

V.92 (11/00) Enhancements to Recommendation V.90

76pp E 20395 F 20396 S 20397 34 CHF

**V.92 Amendment 1 (07/01)** ITU-T Amendment 1 (07/01) to Recommendation V.92 – Enhancements to Recommendation V.90

12pp E 20992 F 20993 S 20994 9 CHF

V.92 Amendment 2 (03/02) Enhancements to Recommendation V.90

8pp E 22218 F 22219 S 22220 9 CHF

#### Interworking with other networks

**V.100 (11/88)** Interconnection between public data networks (PDNs) and the public switched telephone networks (PSTN)

*Individually through the Electronic Bookshop:* 20 CHF

**V.110 (02/00)** Support by an ISDN of data terminal equipments with V-Series type interfaces

This Recommendation is also included but not published in I Series under alias number I.463.

68pp E 18325 F 18326 S 18327 29 CHF

**V.120 (10/96)** Support by an ISDN of data terminal equipment with V-Series type interfaces with provision for statistical multiplexing

This Recommendation is also included but not published in I series under alias number I.465

44pp E 10118 F 10119 S 10120 22 CHF

#### V.120 Corrigendum 1 (05/99)

V.130 (08/95) ISDN terminal adaptor framework

20pp E 6405 F 6406 S 6407 15 CHF

**V.140 (02/98)** Procedures for establishing communication between two multiprotocol audiovisual terminals using digital channels at a multiple of 64 or 56 kbit/s

40pp E 13406 F 13407 S 13408 22 CHF

**V.150.0** (01/03) Modem-over-IP networks:

Foundation

To be published...

V.150.1 (01/03) Modem-over-IP networks:

Procedures for the end-to-end connection of V-series
DCEs

To be published...

Interface layer specifications for data communication

**V.230 (11/88)** General data communications interface layer 1 specification

*Individually through the Electronic Bookshop:* 22 CHF

#### Control procedures

V.250 (05/99) Serial asynchronous automatic dialling and control

96pp E 17329 F 17330 S 17331 39 CHF

V.250 Amendment 1 (07/01) Serial asynchronous automatic dialling and control

24pp E 21612 F 21613 S 21614 17 CHF

**V.250 Amendment 2 (03/02)** Additional commands to support Rec. V.59

8pp E 22202 F 22203 S 22204 9 CHF

V.250 Supplement 1 (06/01) Various extensions to V.250 basic command set

24pp E 21573 F 21574 S 21575 17 CHF

V.251 (02/98) Procedure for DTE-controlled call negotiation

Published as Annex A to V.25 ter (07/97), renumbered in february 98 without being republished.

1pp E 16917 F 16918 S 16919 17 CHF

V.252 (02/98) Procedure for control of V.70 and H.324 terminals by a DTE

32pp E 13082 F 13083 S 13084 17 CHF

**V.253 (02/98)** Control of voice-related functions in a DCE by an asynchronous DTE

100pp E 13503 F 13504 S 13505 44 CHF

#### Modems on digital circuits

V.300 (07/99) A 128 (144) kbit/s data circuit-terminating equipment standardized for use on digital point-to-point leased circuits

24pp E 16473 F 16474 S 16475 17 CHF

#### SERIES X

# Data networks and open system communications

#### Public data networks

#### Services and facilities

**X.1 (03/00)** International user classes of service in, and categories of access to, public data networks and Integrated Services Digital Networks (ISDNs)

16pp E 17966 F 17967 S 17968 12 CHF

X.2 (03/00) International data transmission services and optional user facilities in public data networks and ISDNs

28pp E 18144 F 18145 S 18146 17 CHF

**X.3 (03/00)** Packet assembly/disassembly facility (PAD) in a public data network

28pp E 17969 F 17970 S 17971 9 CHF

**X.4 (11/88)** General structure of signals of International Alphabet No. 5 code for character oriented data transmission over public data networks

*Individually through the Electronic Bookshop:* 20 CHF

**X.5 (10/96)** Facsimile Packet Assembly/Disassembly facility (FPAD) in a public data network

20pp E 9554 F 9555 S 9556 17 CHF

X.6 (08/97) Multicast service definition

40pp E 12426 F 12427 S 12428 22 CHF

X.6 Amendment 1 (03/00) Frame relay PVC multicast service definition

E 19710 F 19711 S 19712 9 CHF 8pp

X.7 (03/00) Technical characteristics of data transmission services

E 18013 F 18014 S 18015 22 CHF 48pp

X.8 (07/94) Multi-aspect PAD (MAP) framework and service definition

E 5544 F 5543 S 5545 11 CHF 9pp

#### X.10 (03/93) Withdrawn (10/96)

Categories of access for Data Terminal Equipment (DTE) to public data transmission services

Deleted as its content is fully covered by ITU-T X.1

#### *Interfaces*

X.20 (11/88) Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for start-stop transmission services on public data networks

Individually through the Electronic Bookshop: 20 CHF

**X.20bis (11/88)** Use on public data networks of Data Terminal Equipment (DTE) which is designed for interfacing to asynchronous duplex V-Series modems

Individually through the Electronic Bookshop: 20 CHF

X.21 (09/92) Interface between Data Terminal Equipment and Data Circuit-terminating Equipment for synchronous operation on public data networks

E 3105 F 3104 S 3106 56pp 24 CHF

X.21bis (11/88) Use on public data networks of Data Terminal Equipment (DTE) which is designed for interfacing to synchronous V-Series modems

Individually through the Electronic Bookshop: **29 CHF** 

**X.22 (11/88)** Multiplex DTE/DCE interface for user classes 3-6

Individually through the Electronic Bookshop: 20 CHF

X.24 (11/88) List of definitions for interchange circuits between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) on public data networks

*Individually through the Electronic Bookshop:* 20 CHF

X.25 (10/96) 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

E 9971 F 9972 S 9973 73 CHF 168pp

X.25 Corrigendum 1 (09/98)

X.26 (03/93) Electrical characteristics for unbalanced double-current interchange circuits operating at data signalling rates nominally up to 100 kbit/s

This Recommendation is published under alias number V.10

**X.27 (10/96)** Electrical characteristics for balanced double-current interchange circuits operating at data signalling rates up to 10 Mbit/s

This Recommendation is published under alias number V.11

**X.28 (12/97)** 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

E 12820 F 12821 60pp S 12822 29 CHF

X.28 Amendment 1 (03/00) Extensions of PAD parameter settings and PAD service signals

E 19767 F 19768 S 19769 9 CHF 8pp

**X.29 (12/97)** 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

20pp E 12683 F 12684 S 12685 17 CHF

**X.30 (03/93)** Support of X.21, X.21 bis and X.20 bis based Data Terminal Equipments (DTEs) by an Integrated Services Digital Network (ISDN)

This Recommendation is also included but not published in I series under alias number I.461

43pp E 3811 F 3810 S 3812 20 CHF

X.31 (11/95) Support of packet mode terminal equipment by an ISDN

This Recommendation is also included but not published in I series under alias number 1.462

E 6509 F 6510 S 6511 30 CHF 68pp

X.32 (10/96) Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and accessing a packet-switched public data network through a public switched telephone network or an integrated services digital network or a circuit-switched public data network

60pp E 9666 F 9667 S 9668 29 CHF

X.33 (10/96) Access to packet-switched data transmission services via frame relaying data transmission services

40pp E 9739 F 9740 S 9741 22 CHF **X.34 (10/96)** Access to packet-switched data transmission services via B-ISDN

60pp E 9669 F 9670 S 9671 17 CHF

#### X.34 Corrigendum 1 (03/00)

**X.35 (11/93)** Interface between a PSPDN and a private PSDN which is based on X.25 procedures and enhancements to define a gateway function that is provided in the PSPDN

40pp E 5307 F 5294 S 5317 20 CHF

X.36 (02/03) Interface between data terminal equipment (DTE) and data circuit-terminating equipment (DCE) for public data networks providing frame relay data transmission service by dedicated circuit

To be published...

**X.37 (04/95)** Encapsulation in X.25 packets of various protocols including frame relay

48pp E 6332 F 6333 S 6334 25 CHF

**X.38 (10/96)** G3 facsimile equipment/DCE interface for G3 facsimile equipment accessing the Facsimile Packet Assembly/Disassembly facility (FPAD) in a public data network situated in the same country

60pp E 9785 F 9786 S 9787 29 CHF

X.39 (10/96) Procedures for the exchange of control information and user data between a Facsimile Packet Assembly/Disassembly (FPAD) facility and a packet mode Data Terminal Equipment (DTE) or another FPAD

36pp E 9791 F 9792 S 9793 22 CHF

**X.42 (03/00)** Procedures and methods for accessing a public data network from a DTE operating under control of a generalized polling protocol

36pp E 20174 F 20175 S 20176 22 CHF

**X.45 (10/96)** Interface between Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) for terminals operating in the packet mode and connected to public data networks, designed for efficiency at higher speeds

100pp E 10349 F 10350 S 10351 44 CHF

X.46 (09/98) Access to FRDTS via B-ISDN

28pp E 15592 F 15593 S 15594 17 CHF

**X.48 (10/96)** Procedures for the provision of a basic multicast service for Data Terminal Equipments (DTEs) using Recommendation X.25

32pp E 9755 F 9756 S 9757 22 CHF

**X.49 (10/96)** Procedures for the provision of an extended multicast service for Data Terminal Equipments (DTEs) using Recommendation X.25

68pp E 10141 F 10142 S 10143 34 CHF

#### Transmission, signalling and switching

**X.50 (11/88)** Fundamental parameters of a multiplexing scheme for the international interface between synchronous data networks

*Individually through the Electronic Bookshop:* 20 CHF

**X.50bis** (11/88) Fundamental parameters of a 48-kbit/s user data signalling rate transmission scheme for the international interface between synchronous data networks

Individually through the Electronic Bookshop: 20 CHF

**X.51 (11/88)** Fundamental parameters of a multiplexing scheme for the international interface between synchronous data networks using 10-bit envelope structure

*Individually through the Electronic Bookshop:* 20 CHF

**X.51bis (11/88)** Fundamental parameters of a 48-kbit/s user data signalling rate transmission scheme for the international interface between synchronous data networks using 10-bit envelope structure

Individually through the Electronic Bookshop: 20 CHF

**X.52 (11/88)** Method of encoding anisochronous signals into a synchronous user bearer

*Individually through the Electronic Bookshop:* 20 CHF

**X.53 (03/93)** Numbering of channels on international multiplex links at 64 kbit/s

1pp E 4575 F 4574 S 4576 8 CHF

**X.54 (11/88)** Allocation of channels on international multiplex links at 64 kbit/s

*Individually through the Electronic Bookshop:* 20 CHF

**X.55 (11/88)** Interface between synchronous data networks using a 6 + 2 envelope structure and single channel per carrier (SCPC) satellite channels

*Individually through the Electronic Bookshop:* 20 CHF

**X.56 (11/88)** Interface between synchronous data networks using an 8 + 2 envelope structure and single channel per carrier (SCPC) satellite channels

*Individually through the Electronic Bookshop:* 20 CHF

**X.57 (11/88)** Method of transmitting a single lower speed data channel on a 64 kbit/s data stream

*Individually through the Electronic Bookshop:* 20 CHF

**X.58 (11/88)** Fundamental parameters of a multiplexing scheme for the international interface between synchronous non-switched data networks using no envelope structure

*Individually through the Electronic Bookshop:* 20 CHF

**X.60 (11/88)** Common channel signalling for circuit-switched data applications

*Individually through the Electronic Bookshop:* 20 CHF

#### X.61 (11/88) Withdrawn (11/88)

Signalling System No. 7 – Data user part

This Recommendation was also included but not published in Q series under alias number Q.741. It was discontinued because it was no longer used

*Individually through the Electronic Bookshop:* 29 CHF

**X.70 (11/88)** Terminal and transit control signalling system for start-stop services on international circuits between anisochronous data networks

*Individually through the Electronic Bookshop:* 22 CHF

**X.71 (11/88)** Decentralized terminal and transit control signalling system on international circuits between synchronous data networks

*Individually through the Electronic Bookshop:* 22 CHF

**X.75 (10/96)** Packet-switched signalling system between public networks providing data transmission services

128pp E 10130 F 10131 S 10132 49 CHF

#### X.75 Corrigendum 1 (09/98)

**X.76 (02/03)** Network-to-network interface between public networks providing PVC and/or SVC frame relay data transmission service

To be published...

X.77 (08/97) Interworking between PSPDNs via B-ISDN

28pp E 12432 F 12433 S 12434 17 CHF

#### X.77 Corrigendum 1 (03/00)

**X.78 (06/99)** Interworking procedures between networks providing frame relay data transmission services via B-ISDN

24pp E 16424 F 16425 S 16426 17 CHF

#### X.78 Corrigendum 1 (03/00)

**X.80 (11/88)** Interworking of interexchange signalling systems for circuit-switched data services

*Individually through the Electronic Bookshop:* 20 CHF

**X.81 (11/88)** Interworking between an ISDN circuit-switched and a circuit-switched public data network (CSPDN)

*Individually through the Electronic Bookshop:* 20 CHF

**X.82 (11/88)** Detailed arrangements for interworking between CSPDNs and PSPDNs based on Recommendation T.70

*Individually through the Electronic Bookshop:* 20 CHF

**X.85/Y.1321 (03/01)** IP over SDH using LAPS

28pp E 20810 F 20811 S 20812 17 CHF

X.85/Y.1321 (03/00) Withdrawn (03/00)

IP over SDH using LAPS

28pp E 20810 F 20811 S 20812 17 CHF

Transmission, signalling and switching

#### X.85/Y.1321 (03/00) Withdrawn (03/00)

IP over SDH using LAPS

28pp E 19227 F 20811 S 20812 17 CHF

**X.86/Y.1323 Amendment 1 (04/02)** Using Ethernet flow control as rate limiting

8pp E 22440 F 22441 S 22442 9 CHF

**X.86/Y.1323 (02/01)** Ethernet over LAPS

20pp E 21904 F 21905 S 21906 12 CHF

Network aspects

**X.92 (11/88)** Hypothetical reference connections for public synchronous data networks

*Individually through the Electronic Bookshop:* 20 CHF

**X.96 (03/00)** Call progress signals in public data networks

16pp E 18045 F 18046 S 18047 12 CHF

#### Network aspects

**X.110 (04/02)** International routing principles and routing plan for Public Data Networks

20pp E 22445 F 22446 S 22447 17 CHF

#### Network aspects

**X.111 (02/03)** Principles for the routing of international frame relay traffic

To be published...

#### Network aspects

**X.115 (04/95)** Definition of address translation capability in public data networks

16pp E 6272 F 6273 S 6274 15 CHF

X.115 Amendment 1 (10/96) Refinements

8pp E 10525 F 10526 S 10527 9 CHF

**X.116 (10/96)** Address translation registration and resolution protocol

28pp E 10535 F 10536 S 10537 17 CHF

**X.121 (10/00)** International numbering plan for public data networks

44pp E 19931 F 19932 S 19933 22 CHF

# **International operation**

Numbering plan of the international telephone service

**X.122/E.166 (03/98)** Numbering plan interworking for the E.164 and X.121 numbering plans

This Recommendation is published with the double number E.166 and X.122

44pp E 13314 F 10010 S 10011 22 CHF

#### Public data networks

#### Network aspects

**X.123** (10/96) Mapping between escape codes and TOA/NPI for E.164/X.121 numbering plan interworking during the transition period

8pp E 9722 F 9723 S 9724 9 CHF

**X.124 (06/99)** Arrangements for the interworking of the E.164 and X.121 numbering plans for frame relay and ATM networks

28pp E 16390 F 16391 S 16392 17 CHF

**X.125 (09/98)** Procedure for the notification of the assignment of international network identification codes for public frame relay data networks and ATM networks numbered under the E.164 numbering plan

12pp E 15443 F 15444 S 15445 12 CHF

**X.130 (11/88)** Call processing delays in public data networks when providing international synchronous circuit-switched data services

*Individually through the Electronic Bookshop:* 20 CHF

**X.131 (11/88)** Call blocking in public data networks when providing international synchronous circuit-switched data services

*Individually through the Electronic Bookshop:* 20 CHF

**X.134 (08/97)** Portion boundaries and packet-layer reference events: Basis for defining packet-switched performance parameters

16pp E 11922 F 11923 S 11924 12 CHF

**X.135 (08/97)** Speed of service (delay and throughput) performance values for public data networks when providing international packet-switched services

Published with ITU-T T.135.

36pp E 12505 F 12506 S 12507 22 CHF

**X.136 (08/97)** Accuracy and dependability performance values for public data networks when providing international packet-switched services

20pp E 12009 F 12010 S 12011 17 CHF

**X.137 (08/97)** Availability performance values for public data networks when providing international packet-switched services

20pp E 12000 F 12001 S 12002 17 CHF

**X.138 (08/97)** Measurement of performance values for public data networks when providing international packet-switched services

44pp E 12043 F 12044 S 12045 22 CHF

**X.139 (08/97)** Echo, drop, generator and test DTEs for measurement of performance values in public data networks when providing international packet-switched services

20pp E 12046 F 12047 S 12048 17 CHF

**X.140 (09/92)** General quality of service parameters for communication via public data networks

25pp E 3236 F 3235 S 3237 15 CHF

**X.141 (11/88)** General principles for the detection and correction of errors in public data networks

A Corrigendum was indicated in 06/1990 for the English version.

Individually through the Electronic Bookshop: 20 CHF

**X.144 (10/00)** User information transfer performance parameters for data networks providing international frame relay PVC service

46pp E 20236 F 20237 S 20238 22 CHF

#### Network aspects

#### X.144 Amendment 1 (02/03)

To be published...

# Network aspects

**X.145** (10/96) Performance for data networks providing international frame relay SVC service

20pp E 10173 F 10174 S 10175 17 CHF

#### Network aspects

#### X.145 Amendment 1 (02/03)

To be published...

#### Network aspects

**X.146 (10/00)** Performance objectives and quality of service classes applicable to frame relay

24pp E 19937 F 19938 S 19939 17 CHF

#### Network aspects

**X.148 (02/03)** Procedures for the measurement of the performance of public data networks providing the international frame relay service

To be published...

#### Maintenance

**X.150** (11/88) Principles of maintenance testing for public data networks using Data Terminal Equipment (DTE) and Data Circuit-terminating Equipment (DCE) test loops

*Individually through the Electronic Bookshop:* 20 CHF

**X.160 (10/96)** Architecture for customer network management service for public data networks

20pp E 10480 F 10481 S 10482 17 CHF

**X.161 (08/97)** Definition of customer network management services for public data networks

28pp E 12610 F 12611 S 12612 17 CHF

**X.162 (03/00)** Definition of management information for customer network management service for public data networks to be used with the CNMc interface

232pp E 18727 F 18728 S 18729 96 CHF

**X.163 (04/95)** Definition of management information for customer network management service for public data networks to be used with the CNMe interface

72pp E 6435 F 6436 S 6437 30 CHF

**X.170 (06/99)** Network-network management architecture for data networks

20pp E 16456 F 16457 S 16458 17 CHF

**X.171 (03/00)** Network-network management services for data networks

16pp E 19633 F 19634 S 19635 12 CHF

#### Administrative arrangements

**X.180 (11/88)** Administrative arrangements for international closed user groups (CUGs)

*Individually through the Electronic Bookshop:* 20 CHF

**X.181 (11/88)** Administrative arrangements for the provision of international permanent virtual circuits (PVCs)

*Individually through the Electronic Bookshop:* 20 CHF

#### **Open Systems Interconnection**

#### Model and notation

**X.200 (07/94)** Information technology – Open Systems Interconnection – Basic Reference Model: The basic model

Common text with ISO/IEC

59pp E 5139 F 5640 S 5641 24 CHF

**X.207 (11/93)** Information technology – Open Systems Interconnection – Application layer structure

Common text with ISO/IEC

20pp E 4517 F 5247 S 5283 15 CHF

#### X.208 (11/88) Withdrawn (10/02)

Specification of Abstract Syntax Notation One (ASN.1)

Withdrawn on 30 October 2002 as it has been superseded by ITU-T X.680-X.683 (1997 and 2002)

*Individually through the Electronic Bookshop:* 34 CHF

X.209 (11/88) Withdrawn (10/02)

Specification of Basic Encoding Rules for Abstract Syntax Notation One (ASN.1)

Withdrawn on 30 October 2002 as it has been superseded by ITU-T X.680-X.683 (1997 and 2002)

*Individually through the Electronic Bookshop:* 20 CHF

Service definitions

**X.210 (11/93)** Information technology – Open systems interconnection – Basic Reference Model: Conventions for the definition of OSI services

Common text with ISO/IEC

25pp E 5412 F 5945 S 5709 15 CHF

X.211 (11/95) Information technology – Open systems interconnection – Physical service definition Common text with ISO/IEC

32pp E 6757 F 7347 S 7348 17 CHF

**X.212 (11/95)** Information technology – Open systems interconnection – Data Link service definition

Common text with ISO/IEC

32pp E 6772 F 7442 S 7443 17 CHF

**X.213 (10/01)** Information technology – Open Systems Interconnection – Network service definition

70pp E 21388 F 21389 S 21390 34 CHF

**X.213 Amendment 2 (03/00)** Addition of the authority and format identifier for ITU-T international network designators

4pp E 19567 F 19568 S 19569 9 CHF

**X.214 (11/95)** Information technology – Open Systems Interconnection – Transport service definition

Common text with ISO/IEC

36pp E 6731 F 7048 S 7049 17 CHF

X.215 (11/95) Information technology – Open Systems Interconnection – Session service definition Common text with ISO/IEC

100pp E 6733 F 6837 S 6838 39 CHF

**X.215 Amendment 1 (08/97)** Efficiency enhancements

Common text with ISO/IEC

8pp E 12367 F 12368 S 12369 9 CHF

**X.215 Amendment 2 (12/97)** Nested connections functional unit

Common text with ISO/IEC

8pp E 12836 F 12837 S 12838 9 CHF

X.215 (1995) Technical Cor. 1 (03/00)

**X.216 (07/94)** Information technology – Open Systems Interconnection – Presentation service definition

Common text with ISO/IEC

41pp E 5363 F 5948 S 5710 20 CHF

X.216 Amendment 1 (08/97) Efficiency

enhancements

Common text with ISO/IEC

8pp E 12370 F 12371 S 12372 9 CHF

X.216 Amendment 2 (12/97) Nested connections functional unit

Common text with ISO/IEC

8pp E 12898 F 12899 S 12900 9 CHF

**X.217 (04/95)** Information technology – Open Systems Interconnection – Service definition for the Association Control Service Element

Common text with ISO/IEC

28pp E 6699 F 7142 S 7143 15 CHF

**X.217bis (09/98)** Information technology – Open Systems Interconnection – Service definition for the Application Service Object Association Control Service Element

Common text with ISO/IEC

32pp E 14399 F 14400 S 14401 22 CHF

**X.217 Amendment 1 (10/96)** Support of authentication mechanisms for the connectionless mode

Common text with ISO/IEC

8pp E 10866 F 10867 S 10868 9 CHF

**X.217 Amendment 2 (08/97)** Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

8pp E 12352 F 12353 S 12354 9 CHF

**X.218 (03/93)** Reliable Transfer: Model and service definition

17pp E 3625 F 3624 S 3626 15 CHF

**X.219 (11/88)** Remote Operations: Model, notation and service definition

*Individually through the Electronic Bookshop:* 20 CHF

Connection-mode protocol specifications

**X.220 (03/93)** Use of X.200-Series protocols in CCITT applications

4pp E 3631 F 3630 S 3632 8 CHF

X.222 (04/95) Use of X.25 LAPB-compatible Data Link procedures to provide the OSI connection-mode Data Link service

This title results from the modification of ITU-T X.222 (04/95) former title by Amendment 1 (10/96).

8pp E 6269 F 6270 S 6271 11 CHF

X.222 Amendment 1 (10/96) Frame relay mapping X.227 (04/95) Information technology – Open Systems Interconnection - Connection-oriented E 10514 F 10515 S 10516 9 CHF 8pp protocol for the Association Control Service Element: Protocol specification **X.223 (11/93)** Use of X.25 to provide the OSI connection-mode Network service for ITU-T Common text with ISO/IEC applications S 9957 22 CHF 44pp E 6743 F 9956 35pp E 5619 F 5618 S 5620 20 CHF **X.227bis** (09/98) Information technology – Open X.223 Amendment 1 (10/96) Transit delay and other Systems Interconnection - Connection-mode refinements protocol for the Application Service Object 8pp E 10538 F 10539 S 10540 9 CHF Association Control Service Element Common text with ISO/IEC X.224 (11/95) Information technology – Open Systems Interconnection – Protocol for providing the 82pp E 14499 F 14500 S 14501 34 CHF connection-mode transport service Common text with ISO/IEC **X.227 Amendment 1 (10/96)** Incorporation of extensibility markers E 9681 F 9682 S 9683 61 CHF 156pp Common text with ISO/IEC X.224 Amendment 1 (08/97) Relaxation of class E 10869 F 10870 S 10871 12 CHF conformance requirements and expedited data 12pp service feature negotiation X.227 Amendment 2 (08/97) Managed objects for Common text with ISO/IEC diagnostic information of public switched telephone E 12373 F 12374 S 12375 9 CHF 8pp network connected V-series modem DCE's E 12376 F 12377 S 12378 9 CHF 8pp X.225 (11/95) Information technology – Open Systems Interconnection - Connection-oriented Session protocol: Protocol specification X.228 Corrigendum 1 (03/00) Common text with ISO/IEC X.228 (11/88) Reliable Transfer: Protocol E 6734 F 9842 S 9843 **73 CHF** 180pp specification X.225 Amendment 1 (08/97) Efficiency 34 CHF Individually through the Electronic Bookshop: enhancements X.229 (11/88) Remote Operations: Protocol Common text with ISO/IEC specification 36pp E 12223 F 12224 S 12225 22 CHF Individually through the Electronic Bookshop: 20 CHF X.225 Amendment 2 (12/97) Nested connections functional unit Connectionless-mode protocol specifications Common text with ISO/IEC **X.233 (08/97)** Information technology – Protocol for E 12901 F 12902 S 12903 12 CHF 16pp providing the connectionless-mode network service: Protocol specification X.225 (1995) Technical Cor. 1 (03/00) Common text with ISO/IEC X.226 (07/94) Information technology – Open Systems Interconnection – Connection-oriented 64pp E 12823 F 12824 S 12825 29 CHF Presentation protocol: Protocol specification **X.234 (07/94)** Information technology – Protocol for Common text with ISO/IEC providing the OSI connectionless-mode transport 60pp E 5364 F 5949 S 5711 29 CHF service X.226 Amendment 1 (08/97) Nested connections Common text with ISO/IEC functional unit E 5621 F 5981 S 5712 15 CHF 8pp E 12226 F 12227 S 12228 17 CHF 24pp X.234 Amendment 1 (11/95) Addition of X.226 Amendment 2 (12/97) Nested connections connectionless-mode multicast capability functional unit Common text with ISO/IEC Common text with ISO/IEC 9 CHF E 7305 F 7306 S 7307 8pp 8pp E 12839 F 12840 S 12841 9 CHF

**X.235 (04/95)** Information technology – Open Systems Interconnection – Connectionless Session protocol: Protocol specification

Common text with ISO/IEC

16pp E 6424 F 6854 S 6855 11 CHF

**X.235 Amendment 1 (06/99)** Efficiency enhancements

Common text with ISO/IEC

12pp E 16226 F 16227 S 16228 12 CHF

**X.236 (04/95)** Information technology – Open Systems Interconnection – Connectionless Presentation protocol: Protocol specification

Common text with ISO/IEC

16pp E 6284 F 6716 S 6487 15 CHF

X.236 Amendment 1 (06/99) Efficiency enhancements

Common text with ISO/IEC

12pp E 16229 F 16230 S 16231 12 CHF

X.237 (04/95) Information technology – Open Systems Interconnection – Connectionless protocol for the Association Control Service Element: Protocol specification

Common text with ISO/IEC

20pp E 6285 F 6485 S 6628 15 CHF

X.237bis (09/98) Information technology – Open Systems Interconnection – Connectionless protocol for the Application Service Object Association Control Service Element

Common text with ISO/IEC

24pp E 14402 F 14403 S 14404 17 CHF

**X.237 Amendment 1 (10/96)** Incorporation of extensibility markers and authentication parameters

Common text with ISO/IEC

8pp E 10872 F 10873 S 10874 9 CHF

X.237 Amd1 (10/96) Technical Cor.1 (06/99)

PICS proformas

#### X.244 (11/88) Withdrawn (10/96)

Procedure for the exchange of protocol identification during virtual call establishment on Packet Switched Public Data Networks

Common text with ISO/IEC

Superseded by the more comprehensive description of protocol identifiers contained in X.263

*Individually through the Electronic Bookshop:* 20 CHF

X.245 (04/95) Information technology – Open
 Systems Interconnection – Connection-oriented
 Session protocol: Protocol Implementation
 Conformance Statement (PICS) proforma

Common text with ISO/IEC

44pp E 6741 F 9762 S 9765 22 CHF

**X.246 (10/96)** Information technology – Open Systems Interconnection – Connection-oriented presentation protocol: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

28pp E 9844 F 9845 S 9846 17 CHF

X.247 (10/96) Information technology – Open
 Systems Interconnection – Protocol specification for the association control service element: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

16pp E 9847 F 9848 S 9849 12 CHF

X.248 (11/95) Information technology – Open Systems Interconnection – Reliable Transfer: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

20pp E 6776 F 9557 S 9558 17 CHF

**X.249 (11/95)** Information technology – Open Systems Interconnection – Remote Operations: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

16pp E 6777 F 9559 S 9560 12 CHF

**X.255 (04/95)** Information technology – Open Systems Interconnection – Connectionless Session protocol: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

16pp E 6189 F 6680 S 6630 11 CHF

**X.256 (04/95)** Information technology – Open Systems Interconnection – Connectionless Presentation protocol: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

16pp E 6190 F 6679 S 6629 11 CHF

X.257 (04/95) Information technology – Open
 Systems Interconnection – Connectionless protocol
 for the Association Control Service Element:
 Protocol Implementation Conformance Statement
 (PICS) proforma

Common text with ISO/IEC

16pp E 6191 F 6459 S 6632 11 CHF

**X.257 Amendment 1 (10/96)** Support of authentication parameters

Common text with ISO/IEC

8pp E 10678 F 10679 S 10680 9 CHF

#### Protocol Identification

**X.260 (10/96)** Information technology – Framework for protocol identification and encapsulation

Common text with ISO/IEC

24pp E 9938 F 9939 S 9940 17 CHF

**X.263 (09/98)** Information technology – Protocol identification in the Network Layer

Common text with ISO/IEC

24pp E 14471 F 14472 S 14473 17 CHF

**X.264 (11/93)** Transport protocol identification mechanism

6pp E 5110 F 5109 S 5111 8 CHF

#### Security Protocols

**X.272 (03/00)** Data compression and privacy over frame relay networks

41pp E 19834 F 19835 S 19836 22 CHF

**X.273 (07/94)** Information technology – Open Systems Interconnection – Network layer security protocol

Common text with ISO/IEC

108pp E 5622 F 6255 S 6180 44 CHF

X.274 (07/94) Information technology –
 Telecommunication and information exchange between systems – Transport layer security protocol
 Common text with ISO/IEC

50pp E 5553 F 6287 S 6288 24 CHF

# Layer Managed Objects

**X.281 (06/99)** Information technology – Elements of management information related to the OSI Physical Layer

Common text with ISO/IEC

24pp E 16132 F 16133 S 16134 17 CHF

**X.282 (06/99)** Elements of management information related to the OSI Data Link layer

136pp E 16464 F 16465 S 16466 55 CHF

**X.283 (12/97)** Information technology – Elements of management information related to the OSI Network layer

Common text with ISO/IEC

288pp E 13122 F 13123 S 13124 96 CHF

**X.284 (12/97)** Information technology – Elements of management information related to the OSI Transport Layer

Common text with ISO/IEC

164pp E 13125 F 13126 S 13127 73 CHF

**X.287 (03/99)** Information technology – Open Systems Interconnection – Structure of management information: Managed objects for supporting upper layers

Common text with ISO/IEC

36pp E 16402 F 16403 S 16404 22 CHF

#### Conformance testing

**X.290 (04/95)** OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – General concepts

60pp E 6639 F 6640 S 6641 25 CHF

**X.291 (04/95)** OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Abstract test suite specification

48pp E 6402 F 6403 S 6404 20 CHF

X.292 (05/02) OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – The Tree And Tabular Combined Notation (TTCN)

To be published...

**X.293 (04/95)** OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Test realization

20pp E 6656 F 6657 S 6658 15 CHF

X.294 (04/95) OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Requirements on test laboratories and clients for the conformance assessment process

44pp E 6659 F 6660 S 6661 20 CHF

**X.295** (04/95) OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Protocol profile test specification

24pp E 6642 F 6643 S 6644 15 CHF

**X.296 (11/95)** OSI conformance testing methodology and framework for protocol Recommendations for ITU-T applications – Implementation conformance statements

64pp E 7250 F 7251 S 7252 29 CHF

#### Interworking between networks

#### General

**X.300** (10/96) General principles for interworking between public networks and between public networks and other networks for the provision of data transmission services

56pp E 10792 F 10793 S 10794 29 CHF

**X.301 (10/96)** Description of the general arrangements for call control within a subnetwork and between subnetworks for the provision of data transmission services

72pp E 10176 F 10177 S 10178 34 CHF

**X.302** (11/88) Description of the general arrangements for internal network utilities within a subnetwork and intermediate utilities between subnetworks for the provision of data transmission services

*Individually through the Electronic Bookshop:* 20 CHF

**X.305 (11/88)** Functionalities of subnetworks relating to the support of the OSI connection-mode network service

*Individually through the Electronic Bookshop:* 20 CHF

**X.320 (10/96)** General arrangements for interworking between integrated services digital networks (ISDNs) for the provision of data transmission services

20pp E 10147 F 10148 S 10149 17 CHF

X.321 (10/96) General arrangements for interworking between Circuit-Switched Public Data Networks (CSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services

This Recommendation is also included but not published in I series under alias number I.540

12pp E 10150 F 10151 S 10152 12 CHF

**X.322** (11/88) General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Circuit-Switched Public Data Networks (CSPDNs) for the provision of data transmission services

Individually through the Electronic Bookshop: 20 CHF

**X.323 (11/88)** General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs)

*Individually through the Electronic Bookshop:* 20 CHF

X.324 (11/88) General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and public mobile systems for the provision of data transmission services

*Individually through the Electronic Bookshop:* 20 CHF

**X.325** (10/96) General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services

This Recommendation is also included but not published in I series under alias number I.550

12pp E 10159 F 10160 S 10161 12 CHF

X.326 (11/88) General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and Common Channel Signalling Network (CCSN)

Individually through the Electronic Bookshop: 20 CHF

X.327 (11/93) General arrangements for interworking between Packet-Switched Public Data Networks (PSPDNs) and private data networks for the provision of data transmission services

9pp E 5156 F 5220 S 5255 11 CHF

**X.328 (10/96)** General arrangements for interworking between Public Data Networks providing frame relay data transmission services and Integrated Services Digital Networks (ISDNs) for the provision of data transmission services

16pp E 10352 F 10353 S 10354 12 CHF

**X.329 (03/00)** General arrangements for interworking between networks providing frame relay data transmission services and B-ISDN

24pp E 18188 F 18189 S 18190 17 CHF

**X.340 (03/93)** General arrangements for interworking between a Packet-Switched Public Data Network (PSPDN) and the international telex network

9pp E 3643 F 3642 S 3644 11 CHF

Satellite data transmission systems

**X.350 (12/97)** General interworking requirements to be met for data transmission in international public mobile satellite systems

12pp E 12731 F 12732 S 12733 12 CHF

**X.351 (11/88)** Special requirements to be met for Packet Assembly/Disassembly facilities (PADs) located at or in association with coast earth stations in the public mobile satellite service

*Individually through the Electronic Bookshop:* 20 CHF

X.352 (11/88) Interworking between packet-switched public data networks and public maritime mobile satellite data transmission systems

*Individually through the Electronic Bookshop:* 20 CHF

**X.353 (11/88)** Routing principles for interconnecting public maritime mobile satellite data transmission systems with public data networks

*Individually through the Electronic Bookshop:* 20 CHF

**X.361 (10/96)** Connection of VSAT systems with Packet-Switched Public Data Networks based on X.25 procedures

24pp E 10355 F 10356 S 10357 17 CHF

#### X.370 (11/88) Withdrawn (10/96)

Arrangements for the transfer of internetwork management information

Deleted because it was such a general Recommendation that it served no useful practical purpose

*Individually through the Electronic Bookshop:* 20 CHF

X.371/Y.1402 (02/01) General arrangements for interworking between Public Data Networks and the Internet

Available as a prepublished version

19pp E 21749 F 21750 S 21751 12 CHF

#### **Message Handling Systems**

**X.400/F.400 (06/99)** Message handling services: Message handling system and service overview

Available as a prepublished version

To be published...

**X.402 (06/99)** Information technology – Message Handling Systems (MHS): Overall architecture

Common text with ISO/IEC

Available as a prepublished version

To be published...

## X.403 (11/88) Withdrawn (11/95)

Message handling systems: conformance testing

Common text with ISO/IEC

This Recommendation was withdrawn because conformance testing concepts and methods defined in it were related to the 1984 MHS Recommendations and were not aligned with either the first or second versions of conformance testing standards. ITU-T X.480 (1992) refers to the 1988 'Blue Book' MHS Recommendations and was better aligned with the testing standards

*Individually through the Electronic Bookshop:* 20 CHF

**X.404 (06/99)** Information technology – Message Handling Systems (MHS): MHS routing – Guide for messaging systems managers

Common text with ISO/IEC

64pp E 16427 F 16428 S 16429 29 CHF

#### X.407 (11/88) Withdrawn (11/95)

Message handling systems: Abstract service definition conventions

Common text with ISO/IEC

This Recommendation was not referenced from any Recommendation and some of its technical content was contained in ITU-T X.402 (1995)

*Individually through the Electronic Bookshop:* 20 CHF

**X.408 (11/88)** Message handling systems: Encoded information type conversion rules

*Individually through the Electronic Bookshop:* 22 CHF

**X.411 (06/99)** Information technology – Message Handling Systems (MHS): Message transfer system: abstract service definition and procedures

Common text with ISO/IEC

Available as a prepublished version

To be published...

**X.412 (06/99)** Information technology – Message Handling System (MHS): MHS routing

76pp E 16524 F 17399 S 17400 34 CHF

**X.413 (06/99)** Information technology – Message Handling Systems (MHS) – Message store: Abstract Service Definition

Common text with ISO/IEC

156pp E 17237 F 17238 S 17239 61 CHF

**X.419 (06/99)** Information technology – Message Handling Systems (MHS): Protocol specifications

Common text with ISO/IEC

Available as a prepublished version

To be published...

**X.420 (06/99)** Information technology – Message Handling Systems (MHS): Interpersonal messaging system

Common text with ISO/IEC

Available as a prepublished version

To be published...

X.421 (06/99) Message handling systems: COMFAX use of MHS

16pp E 18352 F 18353 S 18354 12 CHF

**X.435 (06/99)** Information technology – Message handling services (MHS): Electronic Data Interchange messaging system

Common text with ISO/IEC

120pp E 16552 F 16553 S 16554 49 CHF

**X.440 (06/99)** Message handling systems: Voice messaging system

Available as a prepublished version

To be published...

**X.445 (04/95)** Asynchronous protocol specification – Provision of OSI connection mode network service over the telephone network

40pp E 6479 F 6480 S 6481 20 CHF

X.446 (08/97) Common messaging call API

288pp E 11948 F 11949 S 11950 96 CHF

**X.460 (04/95)** Information technology – Message Handling Systems (MHS) Management: Model and architecture

Common text with ISO/IEC

20pp E 6427 F 6856 S 6857 15 CHF

**X.462 (10/96)** Information technology – Message Handling Systems (MHS) Management: Logging information

Common text with ISO/IEC

96pp E 9640 F 9641 S 9642 39 CHF

**X.467 (10/96)** Information technology – Message Handling Systems (MHS) Management: Message transfer agent management

Common text with ISO/IEC

120pp E 9618 F 9619 S 9620 49 CHF

#### X.480 (09/92) Withdrawn (03/00)

Message handling systems and directory services – conformance testing

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

10pp E 3357 F 3356 S 3358 11 CHF

**X.481 (06/99)** Message handling systems – P2 protocol PICS proforma

28pp E 15651 F 15652 S 15653 17 CHF

**X.482 (06/99)** Message handling systems – P1 protocol PICS proforma

32pp E 15654 F 15655 S 15656 22 CHF

**X.483 (06/99)** Message handling systems – P3 protocol PICS proforma

44pp E 15685 F 15686 S 15687 22 CHF

**X.484 (06/99)** Message handling systems – P7 protocol PICS proforma

76pp E 15710 F 15711 S 15712 39 CHF

**X.485 (09/92)** Message handling systems: Voice messaging system Protocol Implementation Conformance Statement (PICS) proforma

27pp E 3468 F 3467 S 3469 15 CHF

**X.486 (06/99)** Message handling systems – Pedi protocol PICS proforma

24pp E 15636 F 15637 S 15638 17 CHF

**X.487 (06/99)** Message handling systems – IPM-MS attributes PICS proforma

32pp E 16277 F 16278 S 16279 17 CHF

X.488 (06/99) Message handling systems – EDI-MS attributes PICS proforma

12pp E 16280 F 16281 S 16282 17 CHF

#### **Directory**

X.500 (02/01) Information technology – OpenSystems Interconnection – The Directory: Overview of concepts, models and services

Common text with ISO/IEC

30pp E 21260 F 21261 S 21262 17 CHF

**X.501 (02/01)** Information technology – Open Systems Interconnection – The Directory: Models

Common text with ISO/IEC

240pp E 21308 F 21309 S 21310 96 CHF

**X.509 (03/00)** Information technology – Open Systems Interconnection – The Directory: Public-key and attribute certificate frameworks

Common text with ISO/IEC

146pp E 19454 F 19455 S 19456 61 CHF

X.509 (2000) Technical Cor.1 (10/01)

X.509 Cor2 (02/01)

Common text with ISO/IEC

X.509 Cor2 (02/01)

Common text with ISO/IEC

X.509 (2000) Technical Cor.2 (04/02)

X.509 Corrigendum 3 (02/03)

To be published...

X.509 Corrigendum 5 (02/03)

To be published...

**X.511 (02/01)** Information technology – Open Systems Interconnection – The Directory: Abstract service definition

Common text with ISO/IEC

110pp E 20873 F 20874 S 20875 44 CHF

X.518 (02/01) Information technology – Open Systems Interconnection – The Directory: Procedures for distributed operation

Common text with ISO/IEC

121pp E 21373 F 21374 S 21375 49 CHF

**X.519 (02/01)** Information technology – Open Systems Interconnection – The Directory: Protocol specifications

Common text with ISO/IEC

70pp E 21317 F 21318 S 21319 34 CHF

**X.520 (02/01)** Information technology – Open Systems Interconnection – The Directory: Selected attribute types

Common text with ISO/IEC

74pp E 21311 F 21312 S 21313 34 CHF

#### X.520 (2001) Technical Cor.1 (04/02)

X.521 (02/01) Information technology – Open Systems Interconnection – The Directory: Selected object classes

Common text with ISO/IEC

34pp E 21263 F 21264 S 21265 17 CHF

X.525 (02/01) Information technology – Open Systems Interconnection – The Directory: Replication

Common text with ISO/IEC

40pp E 21221 F 21222 S 21223 22 CHF

**X.530 (02/01)** Information technology – Open Systems Interconnection – The Directory: Use of systems management for administration of the Directory

Common text with ISO/IEC

94pp E 21314 F 21315 S 21316 39 CHF

#### X.581 (11/95) Withdrawn (06/02)

Information technology – Open Systems Interconnection – The Directory: Directory Access Protocol – Protocol Implementation Conformance Statement (PICS) proforma

ITU-T Recs. X.581 and X.582 contain the PICS proforma based on the 1988 (first) edition of the Directory Specifications, while ITU-T Recs. X.583 through X.586 provide the PICS proformas for the second edition of the Directory Specifications. Since there are no plans to update these proformas to align with the new 2000/2001 (fourth) edition of the Directory specifications, X.581 and X.582 are considered as obsolete and are withdrawn

28pp E 6687 F 7132 S 7133 15 CHF

#### X.582 (11/95) Withdrawn (06/02)

Information technology – Open Systems Interconnection – The Directory: Directory System Protocol – Protocol Implementation Conformance Statement (PICS) proforma

ITU-T Recs. X.581 and X.582 contain the PICS proforma based on the 1988 (first) edition of the Directory Specifications, while ITU-T Recs. X.583 through X.586 provide the PICS proformas for the second edition of the Directory Specifications. Since there are no plans to update these proformas to align with the new 2000/2001 (fourth) edition of the Directory specifications, X.581 and X.582 are considered as obsolete and are withdrawn

32pp E 6686 F 7147 S 7148 15 CHF

X.583 (12/97) Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) proforma for the Directory Access Protocol

Common text with ISO/IEC

52pp E 13506 F 13507 S 13508 22 CHF

X.584 (12/97) Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) proforma for the Directory System Protocol

Common text with ISO/IEC

52pp E 13478 F 13479 S 13480 29 CHF

X.585 (12/97) Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) proforma for the Directory Operational Binding Management Protocol

Common text with ISO/IEC

28pp E 13481 F 13482 S 13483 17 CHF

X.586 (12/97) Information technology – Open Systems Interconnection – The Directory: Protocol Implementation Conformance Statement (PICS) proforma for the Directory Information Shadowing Protocol

Common text with ISO/IEC

28pp E 13465 F 13466 S 13467 17 CHF

# OSI networking and system aspects

Networking

**X.601 (03/00)** Multi-peer communications framework

Common text with ISO/IEC

20pp E 18573 F 18574 S 18575 17 CHF

158

**X.605 (09/98)** Information technology – Enhanced Communications Transport Service Definition

Common text with ISO/IEC

52pp E 14474 F 14475 S 14476 29 CHF

#### *Networking*

**X.606 (10/01)** Information technology – Enhanced communications transport protocol: Specification of simplex multicast transport

36pp E 21385 F 21386 S 21387 17 CHF

**X.606.1 (02/03)** Enhanced Communications Transport Protocol: Specification of QoS management for simplex multicast transport

To be published...

#### **Networking**

**X.610 (09/92)** Provision and support of the OSI connection-mode Network service

26pp E 3504 F 3503 S 3505 15 CHF

**X.612 (09/92)** Information technology – Provision of the OSI connection-mode network service by packet-mode terminal equipment connected to an Integrated Services Digital Network (ISDN)

Common text with ISO/IEC

19pp E 3043 F 3091 S 3096 15 CHF

X.613 (09/92) Information technology – Use of X.25
 Packet Layer Protocol in conjunction with
 X.21/X.21 bis to provide the OSI connection-mode
 Network service

Common text with ISO/IEC

11pp E 3082 F 3092 S 3101 11 CHF

X.614 (09/92) Information technology – Use of X.25 Packet Layer Protocol to provide the OSI connection-mode Network service over the telephone network

Common text with ISO/IEC

9pp E 3083 F 3093 S 3102 11 CHF

X.622 (07/94) Information technology – Protocol for providing the connectionless-mode network service: Provision of the underlying service by an X.25 Subnetwork

Common text with ISO/IEC

11pp E 5630 F 5950 S 5713 11 CHF

**X.623 (07/94)** Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by a subnetwork that provides the OSI Data Link service

Common text with ISO/IEC

10pp E 5631 F 5715 S 5714 11 CHF

**X.625 (10/96)** Information technology – Protocol for providing the connectionless-mode Network service: Provision of the underlying service by ISDN circuit-switched B-channels

Common text with ISO/IEC

16pp E 9672 F 9673 S 9674 12 CHF

#### **Efficiency**

**X.630 (09/98)** Efficient Open Systems Interconnection (OSI) operations

Common text with ISO/IEC

32pp E 14427 F 14428 S 14429 17 CHF

X.633 (10/96) Information technology – Open systems interconnection – Network Fast Byte Protocol

Common text with ISO/IEC

28pp E 9882 F 9883 S 9884 17 CHF

#### X.633 Addendum 1 (09/98) SDL specifications

This text is published in English only. It includes one diskette containing the SDT files of the SDL specifications of the Network Fast Byte protocol

48pp E 14768 62 CHF

**X.634 (10/96)** Information technology – Open Systems Interconnection – Transport Fast Byte Protocol

Common text with ISO/IEC

28pp E 9885 F 9886 S 9887 17 CHF

#### X.634 Addendum 1 (09/98) SDL specifications

This text is published in English only.

This Annex includes one diskette containing the SDT files of the SDL specifications of the Transport Fast Byte protocol.

28pp E 14764 57 CHF

**X.637 (10/96)** Basic connection-oriented common upper layer requirements

24pp E 10358 F 10359 S 10360 17 CHF

**X.638 (10/96)** Minimal OSI facilities to support basic communications applications

56pp E 10517 F 10518 S 10519 29 CHF

**X.639 (10/96)** Basic connection-oriented requirements for ROSE-based profiles

16pp E 10179 F 10180 S 10181 12 CHF

Quality of service

**X.641 (12/97)** Information technology – Quality of service: Framework

Common text with ISO/IEC

52pp E 13037 F 13038 S 13039 29 CHF

**X.642 (09/98)** Information technology – Quality of service – Guide to methods and mechanisms

Common text with ISO/IEC

32pp E 14468 F 14469 S 14470 17 CHF

Naming, Addressing and Registration

**X.650 (10/96)** Information technology – Open Systems Interconnection – Basic Reference Model: Naming and addressing

Common text with ISO/IEC

28pp E 9684 F 9685 S 9686 17 CHF

**X.660 (09/92)** Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: General procedures

Common text with ISO/IEC

15pp E 3042 F 3090 S 3095 15 CHF

X.660 Amendment 1 (10/96) Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: General procedures – Amend.1: Incorporation of object identifiers components

Common text with ISO/IEC

12pp E 9725 F 9726 S 9727 12 CHF

**X.660 Amendment 2 (08/97)** Incorporation of the root arcs of the object identifier tree

Common text with ISO/IEC

12pp E 12747 F 12748 S 12749 12 CHF

X.662 (08/97) Information technology – Open
 Systems Interconnection – Procedures for the operation of OSI Registration Authorities:
 Registration of values of RH-name-tree components for joint ISO and ITU-T use

Common text with ISO/IEC

8pp E 11735 F 11736 S 11737 9 CHF

X.665 (09/92) Information technology – Open Systems Interconnection – Procedures for the operation of OSI Registration Authorities: Application processes and application entities

Common text with ISO/IEC

6pp E 3286 F 3285 S 3287 11 CHF

X.666 (08/97) Information technology – Open
 Systems Interconnection – Procedures for the operation of OSI Registration Authorities:
 Assignment of international names for use in specific contexts

28pp E 11738 F 11739 S 11740 17 CHF

**X.669 (10/96)** Procedures for the operation of OSI registration authorities: Registration procedures for the ITU-T subordinate arcs

8pp E 10461 F 10462 S 10463 9 CHF

#### X.669 Corrigendum 1 (06/99)

To be published...

**X.670 (10/96)** Procedures for registration agents operating on behalf of organizations to register organization names subordinate to country names

12pp E 10445 F 10446 S 10447 12 CHF

**X.671 (10/96)** Procedures for a registration authority operating on behalf of countries to register organization names subordinate to country names

8pp E 10448 F 10449 S 10450 9 CHF

Abstract Syntax Notation One (ASN.1)

**X.680 (07/02)** Information technology – Abstract Syntax Notation One (ASN.1): Specification of basic notation

To be published...

X.680-X.693 (07/02) ASN.1

To be published...

**X.681 (07/02)** Information technology – Abstract Syntax Notation One (ASN.1): Information object specification

To be published...

**X.682 (07/02)** Information technology – Abstract Syntax Notation One (ASN.1): Constraint specification

To be published...

X.683 (07/02) Information technology – Abstract Syntax Notation One (ASN.1): Parameterization of ASN.1 specifications

To be published...

**X.690 (07/02)** Information technology – ASN.1 encoding rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)

To be published...

**X.691 (07/02)** Information technology – ASN.1 encoding rules: Specification of Packed Encoding Rules (PER)

To be published...

**X.692 (03/02)** Information technology – ASN.1 encoding rules – Specification of encoding control notation (ECN)

To be published...

**X.693 (12/01)** Information technology – ASN.1 encoding rules: XML encoding rules

To be published...

#### **OSI** management

Systems Management framework and architecture

**X.700 (09/92)** Management framework for Open Systems Interconnection (OSI) for CCITT applications

11pp E 3438 F 3437 S 3439 11 CHF

X.701 (08/97) Information technology – Open Systems Interconnection – Systems management overview

Common text with ISO/IEC

32pp E 12568 F 12569 S 12570 17 CHF

**X.702 (11/95)** Information technology – Open Systems Interconnection – Application context for systems management with transaction processing

Common text with ISO/IEC

16pp E 6701 F 7102 S 7103 11 CHF

X.703 (10/97) Information technology – Open Distributed Management Architecture

Common text with ISO/IEC

56pp E 12857 F 12858 S 12859 29 CHF

X.703 Amendment 1 (06/98) Support using Common Object Request Broker Architecture (CORBA)

Common text with ISO/IEC

12pp E 14172 F 14173 S 14174 12 CHF

Management Communication Service and Protocol

X.710 (10/97) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

36pp E 12481 F 12482 S 12483 22 CHF

**X.711 (10/97)** Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

40pp E 12616 F 12617 S 12618 22 CHF

X.711 (1997) Technical Cor. 1 (03/99)

#### X.711 (1997) Technical Cor.2 (02/00)

Common text with ISO/IEC

X.712 (09/92) Information technology – Open Systems Interconnection – Common management information protocol: Protocol Implementation Conformance Statement (PICS) proforma Common text with ISO/IEC

61pp E 3084 F 3094 S 3103 29 CHF

X.712 (1992) Technical Cor. 3 (06/98)

**X.712 (1992) Technical Cor. 1 (10/96)** Technical Corrigenda 1 and 2 8pp

Structure of Management Information

**X.720 (01/92)** Information technology – Open Systems Interconnection – Structure of management information: Management information model

Common text with ISO/IEC

31pp E 3158 F 3157 S 3159 15 CHF

X.720 Amendment 1 (11/95) Generalization of terms

Common text with ISO/IEC

8pp E 6694 F 6947 S 6948 8 CHF

X.720 (1992) Technical Cor. 1 (02/94)

X.721 (02/92) Information technology – Open Systems Interconnection – Structure of management information: Definition of management information Common text with ISO/IEC

63pp E 2828 F 2793 S 2863 29 CHF

X.721 Amendment 1 (08/01) States to support lifecycle

10pp E 21288 S 21290 9 CHF

X.721 (1992) Technical Cor.1 (02/94)

X.721 (1992) Technical Cor.2 (10/96)

X.721 (1992) Technical Cor.3 (06/98)

X.721 (1992) Technical Cor.4 (02/00)

X.722 (01/92) Information technology – Open
 Systems Interconnection – Structure of Management
 Information: Guidelines for the definition of
 managed objects

Common text with ISO/IEC

50pp E 3045 F 3086 S 3046 24 CHF

**X.722 Amendment 1 (11/95)** Set by create and component registration

Common text with ISO/IEC

8pp E 6695 F 6964 S 6965 8 CHF

**X.722 Amendment 2 (08/97)** Addition of the NO-MODIFY syntax element and guidelines extension

Common text with ISO/IEC

16pp E 12484 F 12485 S 12486 12 CHF

**X.722 Amendment 3 (08/97)** Guidelines for the use of Z in formalizing the behaviour of managed objects Common text with ISO/IEC

24pp E 12534 F 12535 S 12536 17 CHF

X.722 (1992) Technical Cor. 1 (10/96)

#### X.722 (1992) Technical Cor.2 (02/00)

Common text with ISO/IEC

**X.723 (11/93)** Information technology – Open Systems Interconnection – Structure of management information: Generic management information

Common text with ISO/IEC

18pp E 4488 F 5213 S 5248 15 CHF

X.723 (1993) Technical Cor. 1 (06/98)

X.723 (1993) Technical Cor.2 (02/00)

X.724 (10/96) Information technology – Open Systems Interconnection – Structure of management information: Requirements and guidelines for implementation conformance statement proformas associated with OSI management

Common text with ISO/IEC

64pp E 9646 F 9647 S 9648 29 CHF

X.725 (11/95) Information technology – Open Systems Interconnection – Structure of management information: General Relationship Model

Common text with ISO/IEC

52pp E 6750 F 9769 S 9770 29 CHF

**X.727 (03/99)** Information technology – Open Systems Interconnection – Structure of management information: Systems management application layer managed objects

Common text with ISO/IEC

16pp E 16090 F 16091 S 16092 17 CHF

#### Management functions and ODMA functions

**X.730 (01/92)** Information technology – Open Systems Interconnection – Systems Management: Object management function

Common text with ISO/IEC

24pp E 3047 F 3087 S 3098 15 CHF

X.730 Amendment 1 (04/95) Implementation

Conformance Statement proformas

Common text with ISO/IEC

32pp E 6423 F 6910 S 6911 15 CHF

#### X.730 (1992) Am1Technical Cor.1 (10/96)

**X.731 (01/92)** Information technology – Open Systems Interconnection – Systems Management: State management function

Common text with ISO/IEC

23pp E 3044 F 3085 S 3097 15 CHF

**X.731 Amendment 1 (04/95)** Implementation Conformance Statement proformas

Common text with ISO/IEC

24pp E 6422 F 6912 S 6913 15 CHF

X.731 (1992) Am1Technical Cor.1 (10/96)

**X.731 Amendment 2 (01/01)** Amendment to X.721 and X.731 to support LIFECYCLE state

Common text with ISO/IEC

10pp E 19903 F 19904 S 19905 9 CHF

X.731 (1992) Technical Cor. 1 (04/95)

X.731 (1992) Technical Cor. 2 (01/01)

**X.732 (01/92)** Information technology – Open Systems Interconnection – Systems Management: Attributes for representing relationships

Common text with ISO/IEC

17pp E 3048 F 3088 S 3099 15 CHF

**X.732 Amendment 1 (04/95)** Implementation Conformance Statement proformas

Common text with ISO/IEC

28pp E 6425 F 6949 S 6950 15 CHF

# X.732 (1992) Amendment 1 Technical Cor.1 (10/96)

**X.733 (02/92)** Information technology – Open Systems Interconnection – Systems Management: Alarm reporting function

Common text with ISO/IEC

20pp E 2830 F 2795 S 2865 15 CHF

X.733 Amendment 1 (04/95) Implementation X.737 (11/95) Information technology – Open Systems Interconnection – Systems management: Conformance Statement proformas Confidence and diagnostic test categories Common text with ISO/IEC Common text with ISO/IEC 36pp E 6293 F 6462 S 6723 20 CHF 68pp E 6781 F 7511 S 7512 30 CHF X.733 Amendment 1 Corrigendum 1 (10/96) X.737 (1995) Technical Cor. 1 (06/98) To be published... X.733 (1992) Technical Cor. 1 (02/94) X.737 (1995) Technical Cor.2 (02/00) X.733 (1992) Technical Cor. 2 (03/99) X.737 (1995) Technical Cor.3 (03/01) Common text with ISO/IEC X.733 Amendment 1 (10/96) Technical Corrigendum 2 X.738 (11/93) Information technology – Open Common text with ISO/IEC Systems Interconnection – Systems management: Summarization function 8pp Common text with ISO/IEC X.734 (09/92) Information technology – Open E 5704 S 6183 30 CHF 59pp F 6296 Systems Interconnection – Systems Management: Event report management function X.738 Amendment 1 (10/96) Implementation Common text with ISO/IEC conformance statement proformas 19pp E 3066 F 3089 S 3100 15 CHF Common text with ISO/IEC E 9621 F 9622 39 CHF 92pp S 9623 X.734 Amendment 1 (04/95) Implementation Conformance Statement proformas X.738 (1993) Technical Cor. 1 (06/98) Common text with ISO/IEC X.738 (1993) Technical Cor.2 (02/00) E 6292 S 6525 15 CHF 28pp F 6738 X.734 (1992) Am1Technical Cor.1 (10/96) **X.739 (11/93)** Information technology – Open Systems Interconnection – Systems Management: X.734 (1992) Technical Cor. 1 (02/94) Metric objects and attributes Common text with ISO/IEC X.734 (1992) Technical Cor. 2 (03/99) E 5448 F 6295 S 6184 24 CHF 50pp X.735 (09/92) Information technology – Open X.739 Amendment 1 (08/97) Implementation Systems Interconnection – Systems Management: conformance statement proformas Log control function Common text with ISO/IEC Common text with ISO/IEC 60pp E 12619 F 12620 S 12621 **29 CHF** 20pp E 3130 F 3129 S 3131 15 CHF X.739 (1993) Technical Cor. 1 (06/98) X.735 Amendment 1 (04/95) Implementation Conformance Statement proformas **X.740 (09/92)** Information technology – Open Common text with ISO/IEC Systems Interconnection – Systems Management: S 6739 E 6290 F 6896 15 CHF 8pp Security audit trail function Common text with ISO/IEC X.735 (1992) Amendment 1 Technical Cor.1 E 3108 F 3107 S 3109 15 CHF 27pp (10/96)X.740 (1992) Technical Cor. 1 (04/95) X.735 (1992) Technical Cor.1 (03/01) Common text with ISO/IEC X.740 (1992) Technical Cor. 2 (10/96) X.736 (01/92) Information technology – Open X.740 (1992) Technical Cor. 3 (06/98) Systems Interconnection – Systems Management: Security alarm reporting function **X.741 (04/95)** Information technology – Open Common text with ISO/IEC Systems Interconnection – Systems management: E 2807 F 2769 S 2842 15 CHF 15pp Objects and attributes for access control Common text with ISO/IEC X.736 Amendment 1 (04/95) Implementation 44 CHF 120pp E 6327 F 6769 S 6730 Conformance Statement proformas Common text with ISO/IEC X.741 (1995) Technical Cor. 1 (10/96) E 6649 F 6740 S 6718 15 CHF X.741 (1995) Technical Cor. 2 (06/98) X.736 (1992) Amendment 1 Technical Cor.1 X.741 (1995) Technical Cor.3 (02/00) (10/96)

X.742 (04/95) Information technology – Open Systems Interconnection – Systems management: Usage metering function for accounting purposes

Common text with ISO/IEC

50pp E 6289 F 6735 S 6722 25 CHF

**X.742 Amendment 1 (10/97)** Implementation conformance statement proformas

Common text with ISO/IEC

52pp E 12845 F 12846 S 12847 29 CHF

X.742 (1995) Technical Cor. 1 (06/98)

X.742 (1995) Technical Cor.2 (02/00)

**X.743** (06/98) Information technology – Open Systems Interconnection – Systems Management: Time Management Function

Common text with ISO/IEC

92pp E 14221 F 14222 S 14223 96 CHF

X.743 (1998) Technical Cor.1 (03/01)

**X.744 (10/96)** Information technology – Open Systems Interconnection – Systems management: Software Management function

Common text with ISO/IEC

140pp E 9965 F 9966 S 9967 55 CHF

X.744 (1996) Technical Cor. 1 (06/98)

Common text with ISO/IEC

This Technical Corrigendum applies to the English electronic version of ITU-T Rec. X.744, and is available in electronic format in English only.

X.744 (1996) Technical Cor.2 (02/00)

X.744 (1996) Technical Cor.3 (03/01)

**X.745** (11/93) Information technology – Open Systems Interconnection – Systems Management: Test management function

Common text with ISO/IEC

48pp E 5082 F 5642 S 5643 20 CHF

X.745 (1993) Technical Cor. 1 (08/97)

X.745 (1993) Technical Cor. 2 (06/98)

X.745 (1993) Technical Cor.3 (02/00)

**X.746 (02/00)** Information technology – Open Systems Interconnection – Systems management: Scheduling function

Common text with ISO/IEC

50pp E 20619 F 20620 S 20621 22 CHF

**X.746 Erratum (02/00)** Erratum to pre-published Recommendation ITU-T X.746 (02/00)

**X.748 (03/99)** Information technology – Open Systems Interconnection – Systems Management: Response Time Monitoring Function

Common text with ISO/IEC

92pp E 16502 F 16503 S 16504 39 CHF

X.749 (08/97) Information technology – Open Systems Interconnection – Systems management: Management domain and management policy management function

Common text with ISO/IEC

104pp E 11970 F 11971 S 11972 44 CHF

**X.750 (10/96)** Information technology – Open Systems Interconnection – Systems management: Management knowledge management function

Common text with ISO/IEC

108pp E 9719 F 9720 S 9721 44 CHF

**X.750 Amendment 1 (10/97)** Extension for General Relationship model

Common text with ISO/IEC

20pp E 12848 F 12849 S 12850 17 CHF

X.750 (1996) Technical Cor.1 (02/00)

**X.751 (11/95)** Information technology – Open Systems Interconnection – Systems management: Changeover function

Common text with ISO/IEC

60pp E 6759 F 10065 S 10066 29 CHF

X.751 (1995) Technical Cor. 1 (06/98)

X.751 (1995) Technical Cor.2 (02/00)

X.753 (10/97) Information technology – Open Systems Interconnection – Systems management: Command sequencer for systems management

Common text with ISO/IEC

180pp E 13006 F 13007 S 13008 73 CHF

X.754 (02/00) Enhanced Event Control Function

20pp E 20434 F 20435 S 20436 17 CHF

X.770 (01/01) ODMA notification dispatch function

Common text with ISO/IEC

32pp E 20479 F 20480 S 20481 22 CHF

X.780 (01/01) TMN guidelines for defining CORBA **Security** managed objects X.800 (03/91) Security architecture for Open E 20494 F 20495 S 20496 39 CHF 86pp Systems Interconnection for CCITT applications F 2109 S 2111 46pp E 2110 X.780 Amendment 1 (05/02) System Objects and user guide for bulk attribute retrieval X.800 Amendment 1 (10/96) Layer Two Security Service and Mechanisms for LANs 14pp E 22264 F 22265 S 22266 **12 CHF** 8pp E 10483 F 10484 S 10485 X.780 Corrigendum 1 (10/01) **X.802 (04/95)** Information technology – Lower layers security model X.780 Corrigendum 2 (05/02) Common text with ISO/IEC E 6122 F 6460 S 6696 24pp X.780.1 (08/01) TMN guidelines for defining coarse-grained CORBA managed object interfaces E 21901 F 21902 S 21903 17 CHF 32pp

X.780.1 Amendment 1 (05/02) System facades and user guide for bulk attribute retrieval

12pp E 22290 F 22291 S 22292 9 CHF

X.780.1 Corrigendum 1 (05/02)

**X.781 (08/01)** Requirements and guidelines for Implementation Conformance Statements proformas associated with CORBA-based systems

32pp E 21793 F 21794 S 21795 17 CHF

X.790 (11/95) Trouble management function for ITU-T applications

120pp E 6473 F 6474 S 6475 44 CHF

X.790 Amendment 1 (10/96) Implementation conformance statement proformas

E 10182 F 10183 S 10184 55 CHF 132pp

X.790 Corrigendum 1 (03/99)

X.790 Corrigendum 2 (03/01)

**X.791 (10/96)** Profile for trouble management function for ITU-T applications

152pp E 11049 F 11050 S 11051 61 CHF

X.792 (03/99) Configuration audit support function for ITU-T applications

E 15931 F 15932 S 15933 17 CHF 20pp

X.792 Corrigendum 1 (08/01)

**X.803 (07/94)** Information technology – Open Systems Interconnection – Upper layers security

Common text with ISO/IEC

28pp E 5716 F 6486 S 6698 15 CHF

17 CHF

9 CHF

15 CHF

X.810 (11/95) Information technology – Open Systems Interconnection - Security frameworks for open systems: Overview

Common text with ISO/IEC

E 6700 F 7134 S 7135 15 CHF 28pp

**X.811 (04/95)** Information technology – Open Systems Interconnection – Security frameworks for open systems: Authentication framework

Common text with ISO/IEC

F 7050 S 7051 25 CHF E 6430 52pp

X.812 (11/95) Information technology – Open Systems Interconnection – Security frameworks for open systems: Access control framework

E 6748 F 7513 S 7514 22 CHF 44pp

**X.813 (10/96)** Information technology – Open Systems Interconnection – Security frameworks for open systems: Non-repudiation framework

Common text with ISO/IEC

E 9742 F 9743 S 9744 17 CHF 28pp

**X.814 (11/95)** Information technology – Open Systems Interconnection – Security frameworks for open systems: Confidentiality framework

Common text with ISO/IEC

E 6749 F 7470 S 7471 17 CHF 24pp

**X.815 (11/95)** Information technology – Open Systems Interconnection – Security frameworks for open systems: Integrity framework

Common text with ISO/IEC

17 CHF 24pp E 6744 F 7372 S 7373

**X.816 (11/95)** Information technology – Open Systems Interconnection – Security frameworks for open systems: Security audit and alarms framework

Common text with ISO/IEC

24pp E 6697 F 7349 S 7350 15 CHF

**X.830 (04/95)** Information technology – Open Systems Interconnection – Generic upper layers security: Overview, models and notation

Common text with ISO/IEC

60pp E 6431 F 7052 S 7053 25 CHF

X.831 (04/95) Information technology – Open Systems Interconnection – Generic upper layers security: Security Exchange Service Element (SESE) service definition

Common text with ISO/IEC

8pp E 6426 F 6966 S 6967 11 CHF

X.832 (04/95) Information technology – Open Systems Interconnection – Generic upper layers security: Security Exchange Service Element (SESE) protocol specification

Common text with ISO/IEC

20pp E 6429 F 6968 S 6969 15 CHF

**X.833 (04/95)** Information technology – Open Systems Interconnection – Generic upper layers security: Protecting transfer syntax specification

Common text with ISO/IEC

12pp E 6428 F 6970 S 6971 11 CHF

X.834 (10/96) Information technology – Open Systems Interconnection – Generic Upper Layers Security: Security Exchange Service Element (SESE) Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

12pp E 9687 F 9688 S 9689 12 CHF

X.835 (10/96) Information technology – Open Systems Interconnection – Generic Upper Layers Security: Protecting transfer syntax Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

16pp E 9728 F 9729 S 9730 12 CHF

**X.841 (10/00)** Information technology – Security techniques – Security information objects for access control

28pp E 19740 F 19741 S 19742 17 CHF

**X.842 (10/00)** Information technology – Security techniques – Guidelines for the use and management of trusted third party services

44pp E 19798 F 19799 S 19800 22 CHF

**X.843 (10/00)** Information technology – Security techniques – Specification of TTP services to support the application of digital signatures

Common text with ISO/IEC

62pp E 19795 F 19796 S 19797 29 CHF

#### **OSI** applications

Commitment, Concurrency and Recovery

**X.851** (12/97) Information technology – Open Systems Interconnection – Service definition for the Commitment, Concurrency and Recovery service element

Common text with ISO/IEC

68pp E 12920 F 12921 S 12922 34 CHF

X.852 (12/97) Information technology – Open Systems Interconnection – Protocol for the Commitment, Concurrency and Recovery service element: Protocol specification

Common text with ISO/IEC

60pp E 12923 F 12924 S 12925 29 CHF

X.853 (11/95) Information technology – Open Systems Interconnection – Protocol for the Commitment, Concurrency and Recovery service element: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

28pp E 6751 F 9761 S 9764 17 CHF

#### Transaction processing

**X.860 (12/97)** Open Systems Interconnection – Distributed Transaction Processing: Model

Common text with ISO/IEC

44pp E 13040 F 13041 S 13042 22 CHF

X.861 (12/97) Open Systems Interconnection – Distributed Transaction Processing: Service definition

Common text with ISO/IEC

144pp E 13085 F 13086 S 13087 55 CHF

**X.862 (12/97)** Open Systems Interconnection – Distributed Transaction Processing: Protocol specification

728pp E 14224 F 14225 S 14226 248 CHF

X.863 (07/94) Information technology – Open Systems Interconnection – Distributed Transaction Processing: Protocol Implementation Conformance Statement (PICS) proforma

Common text with ISO/IEC

30pp E 5552 F 6254 S 5958 20 CHF

#### Remote operations

**X.880 (07/94)** Information technology – Remote Operations: Concepts, model and notation

Common text with ISO/IEC

37pp E 5632 F 5959 S 5960 20 CHF

X.880 Amendment 1 (11/95) Built-in operations

Common text with ISO/IEC

12pp E 6703 F 6972 S 6973 11 CHF

#### X.880 (1994) Technical Cor. 1 (07/95)

**X.881 (07/94)** Information technology – Remote Operations: OSI realizations – Remote Operations Service Element (ROSE) service definition

Common text with ISO/IEC

31pp E 5633 F 6257 S 6116 20 CHF

**X.881 Amendment 1 (11/95)** Mapping to A-UNIT-DATA service and built-in operations

Common text with ISO/IEC

12pp E 6678 F 6951 S 6952 11 CHF

**X.882** (07/94) Information technology – Remote Operations: OSI realizations – Remote Operations Service Element (ROSE) protocol specification

Common text with ISO/IEC

47pp E 5634 F 6262 S 6100 25 CHF

**X.882 Amendment 1 (11/95)** Mapping to A-UNIT-DATA service and built-in operations

Common text with ISO/IEC

12pp E 6771 F 6974 S 6975 12 CHF

#### X.882 (1994) Technical Cor. 1 (07/95)

#### Open distributed processing

X.901 (08/97) Information technology – Open distributed processing – Reference Model: Overview Common text with ISO/IEC

84pp E 11837 F 11838 S 11839 39 CHF

**X.902 (11/95)** Information technology – Open distributed processing – Reference Model: Foundations

Common text with ISO/IEC

24pp E 6745 F 9690 S 9691 17 CHF

**X.903 (11/95)** Information technology – Open distributed processing – Reference Model: Architecture

Common text with ISO/IEC

64pp E 6747 F 9977 S 9978 29 CHF

**X.904 (12/97)** Information technology – Open distributed processing – Reference Model: Architectural semantics

Common text with ISO/IEC

36pp E 12926 F 12927 S 12928 22 CHF

**X.904 Amendment 1 (03/00)** Amendment 1:

Computational formalization

Common text with ISO/IEC

39pp E 18765 F 18766 S 18767 22 CHF

**X.910 (09/98)** Information technology – Open distributed processing – Naming framework

Common text with ISO/IEC

32pp E 14680 F 14681 S 14682 17 CHF

**X.911 (10/01)** Information technology – Open Distributed Processing – Reference Model – Enterprise Language

34pp E 21391 F 21392 S 21393 17 CHF

**X.920 (12/97)** Information technology – Open distributed processing – Interface Definition Language

Common text with ISO/IEC

36pp E 13305 F 13306 S 13307 22 CHF

**X.930 (09/98)** Information technology – Open distributed processing – Interface references and binding

Common text with ISO/IEC

40pp E 14320 F 14321 S 14322 22 CHF

**X.931 (06/99)** Information technology – Open distributed processing – Protocol support for computational interactions

Common text with ISO/IEC

36pp E 16294 F 16295 S 16296 22 CHF

**X.950 (08/97)** Information technology – Open distributed processing – Trading function: Specification

Common text with ISO/IEC

88pp E 11824 F 11825 S 11826 39 CHF

**X.952 (12/97)** Information technology – Open distributed processing – Trading function: Provision of trading function using OSI Directory service

Common text with ISO/IEC

56pp E 13265 F 13266 S 13267 29 CHF

**X.960 (06/99)** Information Technology – Open Distributed Processing – Type Repository Function

Common text with ISO/IEC

36pp E 17572 F 17573 S 17574 22 CHF

#### **Open Systems Interconnection**

X.960 Erratum 1 (10/02)

#### SERIES Y

# Global information infrastructure and Internet protocol aspects

# Global information infrastructure and Internet protocol aspects

#### General

**Y.100 (06/98)** General overview of the Global Information Infrastructure standards development

16pp E 13898 F 13899 S 13900 12 CHF

Y.101 (03/00) GII Terminology – Terms and definition

Available as a prepublished version

20pp E 19418 F 19419 S 19420 17 CHF

**Y.110 (06/98)** Global Information Infrastructure principles and framework architecture

44pp E 14104 F 14105 S 14106 22 CHF

**Y.120 (06/98)** Global Information Infrastructure scenario methodology

16pp E 13889 F 13890 S 13891 12 CHF

Y.120 Annex A (02/99) Examples of use

28pp E 15608 F 15609 S 15610 17 CHF

Y.120 Corrigendum 1 (11/00)

Y.130 (03/00) Information communication architecture

Available as a prepublished version

48pp E 19495 F 19596 S 19597 22 CHF

**Y.140 (11/00)** Global Information Infrastructure (GII): Reference points for interconnection framework

34pp E 20264 F 20265 S 20266 17 CHF

#### Overall network aspects and functions

# Performance objectives

**Y.801/Y.1501/I.351 (10/00)** Relationships among ISDN, Internet protocol, and GII performance recommendations

24pp E 18937 F 18938 S 18939 17 CHF

**Y.1001 (11/00)** IP Framework – A framework for convergence of telecommunications network and IP network technologies

Available as a prepublished version

4pp E 20342 F 20343 S 20344 17 CHF

**Y.1221 (03/02)** Traffic control and congestion control in IP based networks

28pp E 22157 F 22158 S 22159 17 CHF

**Y.1231 (11/00)** IP Access Network Architecture 20pp E 20061 F 20062 S 20063 17 CHF

#### **Internet protocol aspects**

**Y.1241 (03/01)** Support of IP based Services Using IP Transfer Capabilities

22pp E 20179 F 20180 S 20181 17 CHF

**Y.1242/G.769 (08/02)** Circuit Multiplication Equipment optimized for IP-based networks To be published...

Y.1251 (08/02) General architectural model for interworking

18pp E 22806 F 22807 S 22808 12 CHF

Y.1261 (12/02) Service requirements and architecture for voice services over Multi-Protocol Label Switching

To be published...

**Y.1301/G.871 (10/00)** Framework of Optical Transport Network Recommendations

15pp E 19928 F 19929 S 19930 12 CHF

**Y.1302/G.807 (07/01)** Requirements for automatic switched transport networks (ASTN)

22pp E 20720 F 20721 S 20722 17 CHF

**Y.1303/G.7041 (12/01)** Generic framing procedure (GFP)

51pp E 22590 F 22591 S 22592 22 CHF

Y.1331/G.709 (02/01) Interfaces for the Optical Y.1303/G.7041 Amendment 1 (06/02) Amendment 1 Transport Network (OTN) E 20824 F 20825 S 20826 34 CHF E 22726 F 22727 S 22728 9 CHF 84pp 12pp Y.1331 (03/02) Network Based VPNs – Generic Y.1304/G.8080 (11/01) Architecture for the Architecture and Service Requirements automatic switched optical networks (ASON) To be published... E 22221 F 22222 S 22223 22 CHF 48pp Y.1331/G.709 Amendment 1 (11/01) Y.1305/G.7042 (11/01) Link capacity adjustment scheme (LCAS) for virtual concatenated signals E 22593 F 22594 S 22595 29 CHF 53pp E 21947 F 21948 S 21949 17 CHF 24pp Y.1401 (10/00) General requirements for interworking with Internet protocol (IP)-based Y.1305/G.7042 Corrigendum 1 (06/02) networks 24pp E 19382 F 19383 S 19384 17 CHF Y.1310 (03/00) Transport of IP over ATM in public networks Y.1402/X.371 (02/01) General arrangements for E 19480 F 19481 S 19482 **29 CHF** 70pp interworking between Public Data Networks and the Internet Y.1311 (03/02) Network Based VPNs – Generic 19pp E 21749 F 21750 S 21751 12 CHF Architecture and Service Requirements E 22351 F 22352 S 22353 17 CHF Performance objectives **Y.1311.1 (07/01)** Network-based IP VPN over **Y.1501/I.351/Y.801 (10/00)** Relationships among MPLS architecture ISDN, Internet protocol, and GII performance 46pp E 20817 F 20818 S 20819 29 CHF recommendations 24pp E 18937 F 18938 S 18939 17 CHF **Y.1321/X.85 (03/01)** IP over SDH using LAPS Y.1540 (12/02) Internet protocol data communication S 20812 28pp E 20810 F 20811 17 CHF service – IP packet transfer and availability performance parameters **Internet protocol aspects** To be published... Y.1322/G.707 (10/00) Network node interface for the synchronous digital hierarchy (SDH) *Quality of service and network performance* 180pp E 20454 F 20455 S 20456 73 CHF **Y.1541 (05/02)** Network performance objectives for IP-based services Y.1322/G.707 Amendment 1 (11/01) Amendment 1 17 CHF 34pp E 22763 F 22764 S 22765 16pp E 21761 F 21762 S 21763 12 CHF Y.1541 Appendix X (11/02) Speech quality **Y.1322/G.707 Amendment 2 (08/02)** Amendment 2 calculations for Y.1541 hypothetical reference paths S 22719 E 22717 F 22718 12 CHF 16pp To be published... Y.1322/G.707 Corrigendum 1 (03/01) Operation, administration and maintenance Y.1322/G.707 Corrigendum 2 (11/01) Y.1701/G.7710 (11/01) Common equipment management function requirements Y.1322/G.707 Erratum 1 (09/02) 88pp E 22596 F 22597 S 22598 39 CHF 2pp **Y.1703/G.7712 (11/01)** Architecture and **Y.1323/X.86 (02/01)** Ethernet over LAPS specification of data communication network E 21904 F 21905 S 21906 12 CHF 19pp 45pp E 22599 F 22600 S 22601 22 CHF

9 CHF

**Y.1323/X.86 Amendment 1 (04/02)** Using Ethernet

S 22442

E 22440 F 22441

flow control as rate limiting

12pp

S 22914

Y.1704/G.7713 (12/01) Distributed call and

E 22912 F 22913

connection management (DCM)

74pp

34 CHF

Y.1705/G.7714 (11/01) Generalized automatic discovery techniques

22pp E 21414 F 21415 S 21416 17 CHF

Y.1706/G.7715 (06/02) Architecture and

Requirements for Routing in the Automatic Switched Optical Networks

36pp E 22748 F 22749 S 22750 17 CHF

Quality of service and network performance

**Y.1710 (11/02)** Requirements for OAM functionality for MPLS networks

12pp E 23051 F 23052 S 23053 9 CHF

Operation, administration and maintenance

Y.1711 (11/02) OAM mechanism for MPLS networks

To be published...

#### SERIES Z

Languages and general software aspects for telecommunication systems

#### Formal description techniques (FDT)

Specification and Description Language (SDL)

**Z.100 (08/02)** Specification and Description Language (SDL)

To be published...

**Z.100 Annex F (11/00)** SDL formal definition: General

32pp E 21407 F 21409 S 21410 17 CHF

**Z.100 Annex F2 (11/00)** Well-formedness and Transformation rules

218pp E 21224 96 CHF

**Z.100 Annex F3 (11/00)** SDL formal definition: Dynamic Semantics

125pp E 21017 49 CHF

**Z.100 Supplement 1 (05/97)** SDL+ methodology: Use of MSC and SDL (with ASN.1)

88pp E 12677 F 12678 S 12679 39 CHF

**Z.105 (10/01)** SDL combined with ASN.1 modules (SDL/ASN.1)

43pp E 21475 F 21476 S 21477 22 CHF

**Z.106 (08/02)** Common interchange format for SDL To be published...

**Z.107 (11/99)** SDL with embedded ASN.1

8pp E 16920 F 16921 S 16922 9 CHF

**Z.109 (11/99)** SDL combined with UML

40pp E 17740 F 17741 S 17742 22 CHF

Application of Formal Description Techniques

**Z.110 (11/00)** Criteria for use of formal description techniques by ITU-T

12pp E 20915 F 20916 S 20917 9 CHF

Message Sequence Chart

**Z.120 (11/99)** Message sequence chart (MSC)

136pp E 20087 F 20088 S 20089 55 CHF

**Z.120 Annex B (04/98)** Formal semantics of message sequence charts

84pp E 22267 34 CHF

#### **Z.120** Annex C (10/96) Withdrawn (06/02)

Static semantics of message sequence charts

Z.120/Annex C was withdrawn on 2002-06-12 since its content is covered by Z.120/Annex B (1998)

#### **Z.120** Corrigendum 1 (12/01)

**Z.121 (02/03)** Specification and Description
Language (SDL) data binding to Message Sequence
Charts (MSC)

To be published...

**Z.130 (02/99)** ITU object definition language

E 15775 F 15776 S 15777 29 CHF

**Z.140 (07/01)** The tree and tabular combined notation version 3 (TTCN-3): Core language

252pp E 22609 F 22610 S 22611 96 CHF

**Z.141 (07/01)** The Tree and Tabular Combined Notation version 3 (TTCN-3): Tabular presentation format

38pp E 20814 F 20815 S 20816 22 CHF

### *Tree and Tabular Combined Notation (TTCN)*

**Z.142 (02/03)** Testing and Test Control Notation version 3 (TTCN-3): Graphical presentation format To be published...

User Requirements Notation (URN)

**Z.150 (02/03)** User Requirements Notation (URN) – Language requirements and framework

To be published...

#### **Programming languages**

# CHILL: The ITU-T high level language

**Z.200** (11/99) Managed objects for diagnostic information of public switched telephone network connected V-series modem DCE's

232pp E 19317 F 19318 S 19319 96 CHF

# Man-machine language

# General principles

**Z.301 (11/88)** Introduction to the CCITT man-machine language

Individually through the Electronic Bookshop: 20 CHF

**Z.302 (11/88)** The meta-language for describing MML syntax and dialogue procedures

Individually through the Electronic Bookshop: 20 CHF

#### Basic syntax and dialogue procedures

**Z.311 (11/88)** Introduction to syntax and dialogue procedures

*Individually through the Electronic Bookshop:* 20 CHF

Z.312 (11/88) Basic format layout

*Individually through the Electronic Bookshop:* 20 CHF

**Z.314 (11/88)** The character set and basic elements *Individually through the Electronic Bookshop:* 20 CHF

**Z.315 (11/88)** Input (command) language syntax specification

Individually through the Electronic Bookshop: 20 CHF

**Z.316 (11/88)** Output language syntax specification *Individually through the Electronic Bookshop:* 20 CHF

**Z.317 (11/88)** Man-machine dialogue procedures *Individually through the Electronic Bookshop:* 20 CHF

# Extended MML for visual display terminals

**Z.321 (11/88)** Introduction to the extended MML for visual display terminals

*Individually through the Electronic Bookshop:* 20 CHF

**Z.322 (11/88)** Capabilities of visual display terminals *Individually through the Electronic Bookshop:* 20 CHF

#### **Z.323 (11/88)** Man-machine interaction

This Recommendation is also included but not published in E series under alias number E.333.

*Individually through the Electronic Bookshop:* 22 CHF

#### Specification of the man-machine interface

**Z.331 (11/88)** Introduction to the specification of the man-machine interface

Individually through the Electronic Bookshop: 20 CHF

**Z.332 (11/88)** Methodology for the specification of the man-machine interface – General working procedure

*Individually through the Electronic Bookshop:* 20 CHF

**Z.333 (11/88)** Methodology for the specification of the man-machine interface – Tools and methods *Individually through the Electronic Bookshop:* 20 CHF

**Z.334 (11/88)** Subscriber administration

*Individually through the Electronic Bookshop:* 20 CHF

**Z.335 (11/88)** Routing administration

Individually through the Electronic Bookshop: 20 CHF

**Z.336 (11/88)** Traffic measurement administration *Individually through the Electronic Bookshop:* 22 CHF

**Z.337 (11/88)** Network management administration *Individually through the Electronic Bookshop:* 20 CHF

**Z.341 (11/88)** Glossary of terms

*Individually through the Electronic Bookshop:* 22 CHF

**Z.351 (03/93)** Data oriented human-machine interface specification technique – Introduction 6pp E 3999 F 3998 S 4000 8 CHF

**Z.352 (03/93)** Data oriented human-machine interface specification technique – Scope, approach and reference model

22pp E 4272 F 4271 S 4273 15 CHF

**Z.360 (05/97)** Graphic GDMO: A graphic notation for the Guidelines for the Definition of Managed Objects

28pp E 12254 F 12255 S 12256 17 CHF

**Z.361 (02/99)** Design guidelines for Human-Computer Interfaces (HCI) for the management of telecommunications networks

24pp E 15745 F 15746 S 15747 17 CHF

#### **Quality of telecommunication software**

**Z.400 (03/93)** Structure and format of quality manuals for telecommunications software 6pp E 4047 F 4046 S 4048 8 CHF

# Methods for validation and testing

**Z.500 (05/97)** Framework on formal methods in conformance testing

48pp E 12622 F 12623 S 12624 22 CHF

**Z.600 (11/00)** Distributed processing environment architecture

48pp E 21175 F 21176 S 21177 22 CHF

# Mapping of ISO/IEC Standards to ITU-T Recommendations and ITU-T Recommendations to ISO/IEC Standards

The following table gives the ITU-T Recommendation numbers corresponding to the ISO/IEC International Standards ordered ISO numbers.

White lines correspond to identical ITU-T/ISO/IEC texts. Shaded lines correspond to texts that are not identical, but that have same technical content.

# ISO/IEC Standards to ITU-T Recommendations

ISO 646	T.50
ISO/IEC 7498-1	X.200
ISO/IEC 7498-2	X.800
ISO/IEC 7498-3	X.650
ISO/IEC 7498-4	X.700
ISO/IEC 8072	X.214
ISO/IEC 8073	X.224
ISO/IEC 8326	X.215
ISO/IEC 8327-1	X.225
ISO/IEC 8327-2	X.245
ISO/IEC 8348	X.213
ISO/IEC 8473-1	X.233
ISO/IEC 8473-3	X.622
ISO/IEC 8473-4	X.623
ISO/IEC 8473-5	X.625
ISO/IEC 8602	X.234
ISO/IEC 8613-1	T.411
ISO/IEC 8613-2	T.412
ISO/IEC 8613-3	T.413
ISO/IEC 8613-4	T.414
ISO/IEC 8613-5	T.415
ISO/IEC 8613-6	T.416
ISO/IEC 8613-7	T.417
ISO/IEC 8613-8	T.418
ISO/IEC 8613-9	T.419
ISO/IEC 8613-11	T.421
ISO/IEC 8613-12	T.422
ISO/IEC 8613-14	T.424
ISO/IEC 8649	X.217
ISO/IEC 8650-1	X.227
ISO/IEC 8650-2	X.247
ISO/IEC 8822	X.216
ISO/IEC 8823-1	X.226

ISO/IEC 8823-2	X.246
ISO/IEC 8824	X.208
ISO/IEC 8824-1	X.680
ISO/IEC 8824-2	X.681
ISO/IEC 8824-3	X.682
ISO/IEC 8824-4	X.683
ISO/IEC 8825	X.209
ISO/IEC 8825-1	X.690
ISO/IEC 8825-2	X.691
ISO/IEC 8878	X.223
ISO/IEC 8886	X.212
ISO/IEC 9066-1	X.218
ISO/IEC 9066-2	X.228
ISO/IEC 9066-3	X.248
ISO/IEC 9072-1	X.219
ISO/IEC 9072-2	X.229
ISO/IEC 9072-3	X.249
ISO/IEC 9496	Z.200
ISO/IEC 9545	X.207
ISO/IEC 9548-1	X.235
ISO/IEC 9548-2	X.255
ISO/IEC 9574	X.612
ISO/IEC 9576-1	X.236
ISO/IEC 9576-2	X.256
ISO/IEC 9577	X.263
ISO/IEC 9594-1	X.500
ISO/IEC 9594-2	X.501
ISO/IEC 9594-3	X.511
ISO/IEC 9594-4	X.518
ISO/IEC 9594-5	X.519
ISO/IEC 9594-6	X.520
ISO/IEC 9594-7	X.521
ISO/IEC 9594-8	X.509
· ·	· · · · · · · · · · · · · · · · · · ·

ISO/IEC 9594-9	X.525
ISO/IEC 9594-10	X.530
ISO/IEC 9595	X.710
ISO/IEC 9596-1	X.711
ISO/IEC 9596-2	X.712
ISO/IEC 9646-1	X.290
ISO/IEC 9646-2	X.291
ISO/IEC 9646-3	X.292
ISO/IEC 9646-4	X.293
ISO/IEC 9646-5	X.294
ISO/IEC 9646-6	X.295
ISO/IEC 9646-7	X.296
ISO/IEC 9804	X.851
ISO/IEC 9805-1	X.852
ISO/IEC 9805-2	X.853
ISO/IEC 9834-1	X.660
ISO/IEC 9834-3	X.662
ISO/IEC 9834-6	X.665
ISO/IEC 9834-7	X.666
ISO/IEC 10021-1	F.400/X.400
ISO/IEC 10021-2	X.402
ISO/IEC 10021-4	X.411
ISO/IEC 10021-5	X.413
ISO/IEC 10021-6	X.419
ISO/IEC 10021-7	X.420
ISO/IEC 10021-8	F.435
ISO/IEC 10021-9	X.435
ISO/IEC 10021-10	X.412
ISO/IEC 10021-11	X.404
ISO/IEC 10022	X.211
ISO/IEC 10026-1	X.860
ISO/IEC 10026-2	X.861
ICO/IEC 10026 2	X.862
ISO/IEC 10026-3	A.002

ISO/IEC 10026-4	X.863
ISO/IEC 10035-1	X.237
ISO/IEC 10035-2	X.257
ISO/IEC 10040	X.701
ISO/IEC 10164-1	X.730
ISO/IEC 10164-2	X.731
ISO/IEC 10164-3	X.732
ISO/IEC 10164-4	X.733
ISO/IEC 10164-5	X.734
ISO/IEC 10164-6	X.735
ISO/IEC 10164-7	X.736
ISO/IEC 10164-8	X.740
ISO/IEC 10164-9	X.741
ISO/IEC 10164-10	X.742
ISO/IEC 10164-11	X.739
ISO/IEC 10164-12	X.745
ISO/IEC 10164-13	X.738
ISO/IEC 10164-14	X.737
ISO/IEC 10164-15	X.746
ISO/IEC 10164-16	X.750
ISO/IEC 10164-17	X.751
ISO/IEC 10164-18	X.744
ISO/IEC 10164-19	X.749
ISO/IEC 10164-20	X.743
ISO/IEC 10164-21	X.753
ISO/IEC 10164-22	X.748
ISO/IEC 10165-1	X.720
ISO/IEC 10165-2	X.721
ISO/IEC 10165-4	X.722
ISO/IEC 10165-5	X.723
ISO/IEC 10165-6	X.724
ISO/IEC 10165-7	X.725
ISO/IEC 10165-8	X.287
ISO/IEC 10165-9	X.727
ISO/IEC 10181-1	X.810
ISO/IEC 10181-2	X.811
ISO/IEC 10181-3	X.812
ISO/IEC 10181-4	X.813
ISO/IEC 10181-5	X.814
ISO/IEC 10181-6	X.815
ISO/IEC 10181-7	X.816
ISO/IEC 10588	X.613

ISO/IEC ISP 10610-1	T.502
ISO/IEC 10611-3	X.482
ISO/IEC 10611-4	X.483
ISO/IEC 10611-5	X.484
ISO/IEC 10731	X.210
ISO/IEC 10732	X.614
ISO/IEC 10733	X.283
ISO/IEC 10736	X.274
ISO/IEC 10737	X.284
ISO/IEC 10742	X.282
ISO/IEC 10745	X.803
ISO/IEC 10746-1	X.901
ISO/IEC 10746-2	X.902
ISO/IEC 10746-3	X.903
ISO/IEC 10746-4	X.904
ISO/IEC 10918-1	T.81
ISO/IEC 10918-2	T.83
ISO/IEC 10918-3	T.84
ISO/IEC 10918-4	T.86
ISO/IEC ISP 11181-1	T.505
ISO/IEC ISP 11182-1	T.506
ISO/IEC ISP 11188-1	X.637
ISO/IEC ISP 11188-2	X.639
ISO/IEC ISP 11188-3	X.638
ISO/IEC 11544	T.82
ISO/IEC 11570	X.264
ISO/IEC 11575	X.222
ISO/IEC 11577	X.273
ISO/IEC 11586-1	X.830
ISO/IEC 11586-2	X.831
ISO/IEC 11586-3	X.832
ISO/IEC 11586-4	X.833
ISO/IEC 11586-5	X.834
ISO/IEC 11586-6	X.835
ISO/IEC 11587	X.702
ISO/IEC 11588-1	X.460
ISO/IEC 11588-3	X.462
ISO/IEC 11588-8	X.467
ISO/IEC 12062-2	X.481
ISO/IEC 12062-6	X.487
ISO/IEC 12063-2	X.486
700 /TD 0 100 /0 7	V 400
ISO/IEC 12063-5	X.488

ISO/IEC 13235-1	X.950
ISO/IEC 13235-3	X.952
ISO/IEC 13236	X.641
ISO/IEC 13243	X.642
ISO/IEC 13244	X.703
ISO/IEC 13248-1	X.583
ISO/IEC 13248-2	X.584
ISO/IEC 13248-3	X.585
ISO/IEC 13248-4	X.586
ISO/IEC 13252	X.605
ISO/IEC 13522-1	T.171
ISO/IEC TR 13594	X.802
ISO/IEC 13642	X.281
ISO/IEC 13712-1	X.880
ISO/IEC 13712-2	X.881
ISO/IEC 13712-3	X.882
ISO/IEC 13818-1	H.222.0
ISO/IEC 13818-2	H.262
ISO/IEC 14492	T.88
ISO/IEC 14495-1	T.87
ISO/IEC 14516	X.842
ISO/IEC 14608-1	X.581
ISO/IEC 14608-2	X.582
ISO/IEC 14699	X.634
ISO/IEC 14700	X.633
ISO/IEC 14750	X.920
ISO/IEC 14752	X.931
ISO/IEC 14753	X.930
ISO/IEC 14765	X.260
ISO/IEC 14769	X.960
ISO/IEC 14771	X.910
ISO/IEC TR 15294	V.43
ISO/IEC 15816	X.841
ISO/IEC 15945	X.843
ISO/IEC 15953	X.217 bis
ISO/IEC 15954	X.227 bis
ISO/IEC 15955	X.237 bis
ISO/IEC 16485	T.44

# ITU-T Recommendations to ISO/IEC Standards

F.400/X.400	ISO/IEC 10021-1
F.435	ISO/IEC 10021-8
H.222.0	ISO/IEC 13818-1
H.262	ISO/IEC 13818-2
T.44	ISO/IEC 16485
T.50	ISO 646
T.81	ISO/IEC 10918-1
T.82	ISO/IEC 11544
T.83	ISO/IEC 10918-2
T.84	ISO/IEC 10918-3
T.86	ISO/IEC 10918-4
T.87	ISO/IEC 14495-1
T.88	ISO/IEC 14492
T.171	ISO/IEC 13522-1
T.411	ISO/IEC 8613-1
T.412	ISO/IEC 8613-2
T.413	ISO/IEC 8613-3
T.414	ISO/IEC 8613-4
T.415	ISO/IEC 8613-5
T.416	ISO/IEC 8613-6
T.417	ISO/IEC 8613-7
T.418	ISO/IEC 8613-8
T.419	ISO/IEC 8613-9
T.421	ISO/IEC 8613-11
T.422	ISO/IEC 8613-12
T.424	ISO/IEC 8613-14
T.502	ISO/IEC ISP 10610-1
T.505	ISO/IEC ISP 11181-1
T.506	ISO/IEC ISP 11182-1
V.43	ISO/IEC TR 15294
X.200	ISO/IEC 7498-1
X.207	ISO/IEC 9545
X.208	ISO/IEC 8824
X.209	ISO/IEC 8825
X.210	ISO/IEC 10731
X.211	ISO/IEC 10022
X.212	ISO/IEC 8886
X.213	ISO/IEC 8348
X.214	ISO/IEC 8072
X.215	ISO/IEC 8326
X.216	ISO/IEC 8822
X.217	ISO/IEC 8649

X.217 bis ISO/IEC 15953 X.218 ISO/IEC 9066-1 X.219 ISO/IEC 9072-1 X.222 ISO/IEC 11575 X.223 ISO/IEC 8878 X.224 ISO/IEC 8073 X.225 ISO/IEC 8327-1 X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 bis ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9576-1 X.237 ISO/IEC 15955 X.246 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8823-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.256 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.248 ISO/IEC 9072-3 X.256 ISO/IEC 9576-2 X.249 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.258 ISO/IEC 11570 X.259 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.281 ISO/IEC 10737 X.282 ISO/IEC 10737 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10766-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-1 X.291 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5 X.294 ISO/IEC 9646-5 X.295 ISO/IEC 9646-6		
X.219 ISO/IEC 9072-1 X.222 ISO/IEC 11575 X.223 ISO/IEC 8878 X.224 ISO/IEC 8073 X.225 ISO/IEC 8327-1 X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.260 ISO/IEC 9576-2 X.260 ISO/IEC 10035-2 X.261 ISO/IEC 10035-2 X.262 ISO/IEC 10035-2 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10737 X.284 ISO/IEC 10737 X.285 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10766-8 X.290 ISO/IEC 10766-9646-1 X.291 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.217 bis	ISO/IEC 15953
X.222 ISO/IEC 11575 X.223 ISO/IEC 8878 X.224 ISO/IEC 8073 X.225 ISO/IEC 8327-1 X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 bis ISO/IEC 9066-2 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 8602 X.233 ISO/IEC 8602 X.234 ISO/IEC 8602 X.235 ISO/IEC 9576-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8823-2 X.248 ISO/IEC 8823-2 X.249 ISO/IEC 9066-3 X.249 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10737 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10765-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.218	ISO/IEC 9066-1
X.223 ISO/IEC 8878 X.224 ISO/IEC 8073 X.225 ISO/IEC 8327-1 X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 Dis ISO/IEC 15954 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 Dis ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9072-3 X.255 ISO/IEC 9072-3 X.256 ISO/IEC 9576-2 X.248 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.249 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10737 X.284 ISO/IEC 10737 X.285 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10737 X.288 ISO/IEC 10737 X.289 ISO/IEC 10737 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5	X.219	ISO/IEC 9072-1
X.224 ISO/IEC 8073 X.225 ISO/IEC 8327-1 X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 bis ISO/IEC 15954 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8602 X.234 ISO/IEC 9548-1 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8823-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9072-3 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.274 ISO/IEC 10736 X.281 ISO/IEC 10733 X.281 ISO/IEC 10737 X.282 ISO/IEC 10737 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10766-2 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.222	ISO/IEC 11575
X.225 ISO/IEC 8327-1 X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 bis ISO/IEC 15954 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9666-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9072-3 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-4 X.293 ISO/IEC 9646-4 X.293 ISO/IEC 9646-5	X.223	ISO/IEC 8878
X.226 ISO/IEC 8823-1 X.227 ISO/IEC 8650-1 X.227 bis ISO/IEC 15954 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8602 X.234 ISO/IEC 8602 X.235 ISO/IEC 9576-1 X.236 ISO/IEC 10035-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9072-3 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.260 ISO/IEC 1577 X.264 ISO/IEC 1577 X.274 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10766-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-1 X.293 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.224	ISO/IEC 8073
X.227 ISO/IEC 8650-1 X.227 bis ISO/IEC 15954 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8602 X.234 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 11570 X.273 ISO/IEC 10736 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.293 ISO/IEC 9646-5	X.225	ISO/IEC 8327-1
X.227 bis ISO/IEC 15954 X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.260 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 1577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.226	ISO/IEC 8823-1
X.228 ISO/IEC 9066-2 X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 8327-2 X.245 ISO/IEC 8823-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 1577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.293 ISO/IEC 9646-5 ISO/IEC 9646-5	X.227	ISO/IEC 8650-1
X.229 ISO/IEC 9072-2 X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.227 bis	ISO/IEC 15954
X.233 ISO/IEC 8473-1 X.234 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10765-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5 X.294 ISO/IEC 9646-5	X.228	ISO/IEC 9066-2
X.234 ISO/IEC 8602 X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9576-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.229	ISO/IEC 9072-2
X.235 ISO/IEC 9548-1 X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.233	ISO/IEC 8473-1
X.236 ISO/IEC 9576-1 X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.234	ISO/IEC 8602
X.237 ISO/IEC 10035-1 X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5	X.235	ISO/IEC 9548-1
X.237 bis ISO/IEC 15955 X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5	X.236	ISO/IEC 9576-1
X.245 ISO/IEC 8327-2 X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5 X.293 ISO/IEC 9646-5	X.237	ISO/IEC 10035-1
X.246 ISO/IEC 8823-2 X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11570 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.237 bis	ISO/IEC 15955
X.247 ISO/IEC 8650-2 X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 1570 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.283 ISO/IEC 10737 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5	X.245	ISO/IEC 8327-2
X.248 ISO/IEC 9066-3 X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10742 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.293 ISO/IEC 9646-5	X.246	ISO/IEC 8823-2
X.249 ISO/IEC 9072-3 X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 10736 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10743 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-4 X.293 ISO/IEC 9646-5	X.247	ISO/IEC 8650-2
X.255 ISO/IEC 9548-2 X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-5	X.248	ISO/IEC 9066-3
X.256 ISO/IEC 9576-2 X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 13642 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.249	ISO/IEC 9072-3
X.257 ISO/IEC 10035-2 X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 10742 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.255	ISO/IEC 9548-2
X.260 ISO/IEC 14765 X.263 ISO/IEC 9577 X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 13642 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.256	ISO/IEC 9576-2
X.263 ISO/IEC 9577  X.264 ISO/IEC 11570  X.273 ISO/IEC 11577  X.274 ISO/IEC 10736  X.281 ISO/IEC 13642  X.282 ISO/IEC 10742  X.283 ISO/IEC 10733  X.284 ISO/IEC 10737  X.287 ISO/IEC 10165-8  X.290 ISO/IEC 9646-1  X.291 ISO/IEC 9646-2  X.292 ISO/IEC 9646-3  X.293 ISO/IEC 9646-4  X.294 ISO/IEC 9646-5	X.257	ISO/IEC 10035-2
X.264 ISO/IEC 11570 X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 13642 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.260	ISO/IEC 14765
X.273 ISO/IEC 11577 X.274 ISO/IEC 10736 X.281 ISO/IEC 13642 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.263	ISO/IEC 9577
X.274 ISO/IEC 10736 X.281 ISO/IEC 13642 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.264	ISO/IEC 11570
X.281 ISO/IEC 13642 X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.273	ISO/IEC 11577
X.282 ISO/IEC 10742 X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.274	ISO/IEC 10736
X.283 ISO/IEC 10733 X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.281	ISO/IEC 13642
X.284 ISO/IEC 10737 X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.282	ISO/IEC 10742
X.287 ISO/IEC 10165-8 X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.283	ISO/IEC 10733
X.290 ISO/IEC 9646-1 X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.284	ISO/IEC 10737
X.291 ISO/IEC 9646-2 X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.287	ISO/IEC 10165-8
X.292 ISO/IEC 9646-3 X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.290	ISO/IEC 9646-1
X.293 ISO/IEC 9646-4 X.294 ISO/IEC 9646-5	X.291	ISO/IEC 9646-2
X.294 ISO/IEC 9646-5	X.292	ISO/IEC 9646-3
	X.293	ISO/IEC 9646-4
X.295 ISO/IEC 9646-6	X.294	ISO/IEC 9646-5
	X.295	ISO/IEC 9646-6

X.296	ISO/IEC 9646-7
X.402	ISO/IEC 10021-2
X.404	ISO/IEC 10021-11
X.411	ISO/IEC 10021-4
X.412	ISO/IEC 10021-10
X.413	ISO/IEC 10021-5
X.419	ISO/IEC 10021-6
X.420	ISO/IEC 10021-7
X.435	ISO/IEC 10021-9
X.460	ISO/IEC 11588-1
X.462	ISO/IEC 11588-3
X.467	ISO/IEC 11588-8
X.481	ISO/IEC 12062-2
X.482	ISO/IEC 10611-3
X.483	ISO/IEC 10611-4
X.484	ISO/IEC 10611-5
X.486	ISO/IEC 12063-2
X.487	ISO/IEC 12062-6
X.488	ISO/IEC 12063-5
X.500	ISO/IEC 9594-1
X.501	ISO/IEC 9594-2
X.509	ISO/IEC 9594-8
X.511	ISO/IEC 9594-3
X.518	ISO/IEC 9594-4
X.519	ISO/IEC 9594-5
X.520	ISO/IEC 9594-6
X.521	ISO/IEC 9594-7
X.525	ISO/IEC 9594-9
X.530	ISO/IEC 9594-10
X.581	ISO/IEC 14608-1
X.582	ISO/IEC 14608-2
X.583	ISO/IEC 13248-1
X.584	ISO/IEC 13248-2
X.585	ISO/IEC 13248-3
X.586	ISO/IEC 13248-4
X.605	ISO/IEC 13252
X.612	ISO/IEC 9574
X.613	ISO/IEC 10588
X.614	ISO/IEC 10732
X.622	ISO/IEC 8473-3
X.623	ISO/IEC 8473-4
X.625	ISO/IEC 8473-5

X.633	ISO/IEC 14700
X.634	ISO/IEC 14699
X.637	ISO/IEC ISP 11188-1
X.638	ISO/IEC ISP 11188-3
X.639	ISO/IEC ISP 11188-2
X.641	ISO/IEC 13236
X.642	ISO/IEC 13243
X.650	ISO/IEC 7498-3
X.660	ISO/IEC 9834-1
X.662	ISO/IEC 9834-3
X.665	ISO/IEC 9834-6
X.666	ISO/IEC 9834-7
X.680	ISO/IEC 8824-1
X.681	ISO/IEC 8824-2
X.682	ISO/IEC 8824-3
X.683	ISO/IEC 8824-4
X.690	ISO/IEC 8825-1
X.691	ISO/IEC 8825-2
X.700	ISO/IEC 7498-4
X.701	ISO/IEC 10040
X.702	ISO/IEC 11587
X.703	ISO/IEC 13244
X.710	ISO/IEC 9595
X.711	ISO/IEC 9596-1
X.712	ISO/IEC 9596-2
X.720	ISO/IEC 10165-1
X.721	ISO/IEC 10165-2
X.722	ISO/IEC 10165-4
X.723	ISO/IEC 10165-5
X.724	ISO/IEC 10165-6
X.725	ISO/IEC 10165-7
X.727	ISO/IEC 10165-9

X.730	ISO/IEC 10164-1
X.731	ISO/IEC 10164-2
X.732	ISO/IEC 10164-3
X.733	ISO/IEC 10164-4
X.734	ISO/IEC 10164-5
X.735	ISO/IEC 10164-6
X.736	ISO/IEC 10164-7
X.737	ISO/IEC 10164-14
X.738	ISO/IEC 10164-13
X.739	ISO/IEC 10164-11
X.740	ISO/IEC 10164-8
X.741	ISO/IEC 10164-9
X.742	ISO/IEC 10164-10
X.743	ISO/IEC 10164-20
X.744	ISO/IEC 10164-18
X.745	ISO/IEC 10164-12
X.746	ISO/IEC 10164-15
X.748	ISO/IEC 10164-22
X.749	ISO/IEC 10164-19
X.750	ISO/IEC 10164-16
X.751	ISO/IEC 10164-17
X.753	ISO/IEC 10164-21
X.800	ISO/IEC 7498-2
X.802	ISO/IEC TR 13594
X.803	ISO/IEC 10745
X.810	ISO/IEC 10181-1
X.811	ISO/IEC 10181-2
X.812	ISO/IEC 10181-3
X.813	ISO/IEC 10181-4
X.814	ISO/IEC 10181-5
X.815	ISO/IEC 10181-6
X.816	ISO/IEC 10181-7

X.830	ISO/IEC 11586-1
X.831	ISO/IEC 11586-2
X.832	ISO/IEC 11586-3
X.833	ISO/IEC 11586-4
X.834	ISO/IEC 11586-5
X.835	ISO/IEC 11586-6
X.841	ISO/IEC 15816
X.842	ISO/IEC 14516
X.843	ISO/IEC 15945
X.851	ISO/IEC 9804
X.852	ISO/IEC 9805-1
X.853	ISO/IEC 9805-2
X.860	ISO/IEC 10026-1
X.861	ISO/IEC 10026-2
X.862	ISO/IEC 10026-3
X.863	ISO/IEC 10026-4
X.880	ISO/IEC 13712-1
X.881	ISO/IEC 13712-2
X.882	ISO/IEC 13712-3
X.901	ISO/IEC 10746-1
X.902	ISO/IEC 10746-2
X.903	ISO/IEC 10746-3
X.904	ISO/IEC 10746-4
X.910	ISO/IEC 14771
X.920	ISO/IEC 14750
X.930	ISO/IEC 14753
X.931	ISO/IEC 14752
X.950	ISO/IEC 13235-1
X.952	ISO/IEC 13235-3
X.960	ISO/IEC 14769
Z.200	ISO/IEC 9496

# TRANSFERRED ITU-R CMTT RECOMMENDATIONS TO ITU-T J-SERIES

(by CMTT number order)

These Recommendations were originally developped by ITU Radiocommunications Sector and subsequently transferred to ITU Standardization Sector.

ITU-R Number	ITU-T Number	Approval date	Title
CMTT 473	J.63	01/06/90	Insertion of test signals in the field-blanking interval of monochrome and colour television signals
CMTT 474-1	J.24	26/02/82	Modulation of signals carried by sound-programme circuits by interfering signals from power supply sources
CMTT 502	J.11	25/11/88	Hypothetical reference circuits for sound-programme transmissions
CMTT 503	J.23	25/11/88	Performance characteristics of 7 kHz type (narrow bandwidth) sound-programme circuits
CMTT 505	J.21	22/08/94	Performance characteristics of 15 kHz-type sound-programme circuits – Circuits for high quality monophonic and stereophonic transmissions
CMTT 567-3	J.61	01/06/90	Transmission performance of television circuits designed for use in international connections
CMTT 568	J.62	26/02/78	Single value of the signal-to-noise ratio for all television systems
CMTT 569	J.64	26/02/86	Definitions of parameters for simplified automatic measurement of television insertion test signals
CMTT 570	J.65	26/02/78	Standard test signal for conventional loading of a television channel
CMTT 571	J.19	25/11/88	A conventional test signal simulating sound-programme signals for measuring interference in other channels
CMTT 572	J.66	26/02/78	Transmission of one sound programme associated with analogue television signal by means of time division multiplex in the line synchronizing pulse
CMTT 603	J.68	26/02/82	Hypothetical reference chain for television transmissions over very long distances
CMTT 604-2	J.85	01/06/90	Digital television transmission over long distances – General principles
CMTT 605-1	J.25	23/05/86	Estimation of transmission performance of sound-programme circuits shorter or longer than the hypothetical reference circuit
CMTT 606-1	J.53	01/06/90	Sampling frequency to be used for the digital transmission of high-quality sound-programme signals
CMTT 645-1	J.26	01/06/90	Test signals to be used on international sound-programme connections

ITU-R Number	ITU-T Number	Approval date	Title
CMTT 658-1	J.86	01/06/90	Mixed analogue-and-digital transmission of analogue composite television signals over long distances
CMTT 659	J.51	22/08/94	General principles and user requirements for the digital transmission of high quality sound programmes
CMTT 660	J.54	23/05/86	Transmission of analogue high-quality sound-programme signals on mixed analogue-and-digital circuits using 384 kbit/s channels
CMTT 661-1	J.27	01/06/90	Signals for the alignment of international sound-programme connections
CMTT 717	J.100	01/06/90	Tolerances for transmission time differences between the vision and sound components of a television signal
CMTT 718	J.55	01/06/90	Digital transmission of high-quality sound-programme signals on distribution circuits using 480 kbit/s (496 kbit/s) per audio channel
CMTT 719	J.56	01/06/90	Transmission of high-quality sound-programme analogue signals over mixed analogue/digital circuits at 320 kbit/s
CMTT 720	J.101	01/06/90	Measurement methods and test procedures for teletext signals
CMTT 721	J.80	08/09/93	Transmission of component-coded digital television signals for contribution-quality applications at bit rates near 140 Mbit/s
CMTT 723	J.81	08/09/93	Transmission of component-coded digital television signals for contribution-quality applications at the third hierarchical level of ITU-T Recommendation G.702
CMTT 724	J.57	01/06/90	Transmission of digital studio quality sound signals over H1 channels
CMTT 772	J.67	22/08/94	Test signals and measurement techniques for transmission circuits carrying MAC/packet signals or HD-MAC signals

# **ITU-T HANDBOOKS**

Operation

Instructions for the international Telephone Service (1993)

These instructions correspond to Recommendation ITU-T E.141

Article: E 3382 F 3381 S 3383

**A** 5961 23 CHF

**Network Planning** 

Optical Fibre System Planning Guide (1989)

Article: E 1277 F 1278 S 1279 140 CHF

Handbook on Transmission Planning (1993)

Article: E 3214 F 3213 S 3215 28 CHF

Handbook on Quality of Service and Network Performance (1993)

Article: E 2977 F 2976 S 2978 37 CHF

Implementation Guidelines

Guidelines for Preparing and Conducting Field Trials of Digital Switching Equipments (1987)

Article: E 1116 F 1117 S 1118 20 CHF

ISDN Field Trial Guidelines (1991)

Article: E 2067 F 2066 S 2068 38 CHF

Guidelines for Implementing a Signalling System No. 7 Network (1991)

Article: E 1910 F 1909 S 1911 37 CHF

Introduction of New Technology in Local Network (1993)

*Article:* **E** 3343 58 CHF

**Outside Plant** 

Outside Plant Technologies for Public Networks (1992)

Article: E 2075 F 2074 S 2076 122 CHF

Preservation of Wooden Poles Carrying Overhead Telecommunication Lines (1974)

Article: E 493 F 494 S 495 23 CHF

Jointing of Plastic-Sheathed Cables (1978)

Article: E 484 F 486 S 487 27 CHF

Jointing of Telecommunication Cable Conductors (1982)

Article: **E** 489 **F** 490 **S** 491 47 CHF

Optical Fibres for Telecommunications (1984)

*Article:* **E** 1041 **F** 1042 **S** 1043

**A** 4721

Construction, Installation, Jointing and Protection of Optical Fibre Cables (1994)

*Article:* **E** 3775 **F** 3774 **S** 3776

**R** 9590 **A** 5962 53 CHF

70 CHF

Application of Computers and Microprocessors to the Construction, Installation and Protection of Telecommunication Cables (1999)

Article: E 14517 F 14695 S 14696 20 CHF

Protection of telecommunication buildings from fire (2001)

Article: E 19255 F 19256 S 19257 28 CHF

Handbook on Marinized Terrestrial Cables (2001)

Article: E 20502 F 20503 S 20504 34 CHF

Addition to section 3 of the Handbook on Telephonometry (2001)

Article: E 20261 F 20262 S 20263 12 CHF

Guide to the use of ITU-T publications produced by Study Group 5 aimed at achieving electromagnetic compatibility and safety (2001)

Article: E 20954 F 20955 S 20956 17 CHF

Handbook on interference measuring techniques (2001)

Article: E 20506 F 20505 S 20507 38 CHF

Protection against Electromagnetic Effects

Earthing of Telecommunication Installations (1976)

Article: E 497 F 498 S 499 41 CHF

The Protection of Telecommunication Lines and Equipment Against Lightning Discharges – Chapters 1 to 5 (1974)

Article: E 689 F 690 S 691 85 CHF

Chapters 6, 7 and 8 (1978)

Article: **E** 693 **F** 694 **S** 695 42 CHF

Chapters 9 and 10 (1994)

Article: E 5479 F 5478 S 5480 62 CHF

**Directives** 

Directives Concerning the Protection of Telecommunication Lines against Harmful Effects from Electric Power and Electrified Railway Lines.

**Volume I:** Design, construction and operational principles of telecommunication, power and electrified railway facilities (1990)

Article: E 1773 F 1764 S 1782 36 CHF

**Volume II:** Calculating induced voltages and currents in practical cases (1999)

Article: E 15034 F 15065 S 15068 160 CHF

**Volume III:** Capacitive, inductive and conductive coupling: physical theory and calculation methods (1990)

Article: E 1775 F 1766 S 1784 56 CHF

**Volume IV:** Inducing currents and voltages in electrified railway systems (1990)

Article: **E** 1776 **F** 1767 **S** 1785 62 CHF

**Volume V:** Inducing currents and voltages inpower transmission and distribution systems (1999)

Article: E 15071 F 15072 S 15073 24 CHF

Volume VI: Danger and disturbance (1990)

Article: E 1778 F 1769 S 1787 21 CHF

Volume VII: Protective measures and safety

precautions. (1990)

Article: E 1779 F 1770 S 1788 21 CHF

Volume VIII: Protective devices (1990)

Article: E 1780 F 1771 S 1789 9 CHF

Volume IX: Testing methods and measuring

apparatus (1990)

Article: E 1781 F 1772 S 1790 84 CHF

**Measurement Methods** 

Handbook on Telephonometry (1993)

Article: E 3771 F 3770 S 3772 86 CHF

Additions to the Handbook on Telephonometry (1999)

Article: E 14626 F 14627 S 14628 12 CHF

Addition to section 2.3 of the Handbook on Telephonometry (2000)

**Forthcoming** 

Compendium of Cable Measurement Methods (1984)

Article: E 458 F 471 S 474 40 CHF

Formal Languages

Introduction to CHILL (1993)

Only available in English

Article: **E** 3739 23 CHF

CHILL User Manual (1986)

Only available in English

Article: **E** 1055 31 CHF

CHILL Formal Definition – Volume I, Parts 1, 2, 3 (1982)

Only available in English

*Article:* **E** 1052 31 CHF

CHILL Formal Definition – Volume II, Part 4 (1982)

Only available in English

Article: **E** 1053 43 CHF

180 ITU-T 02/03

# **ITU-T SOFTWARE**

The following is a list of the different software, test sequences and data published by ITU-T, and intended to test different communication equipment. Each software forms generally an integral part of a Recommendation and is published as an enclosure to it. Details about price and article number can be found in the Recommendation list.. Some of these are not included in *ITU-T Recommendations on CD-ROM*. For more information, please contact ITU Sales Services at sales@itu.int.

Series	Subject
G.191 (11/00)	This Recommendation includes 1 CD-ROM containing the software tools library (STL-2000) ). The STL-2000 Manual is freely available from this Website for information purpose
G.722 Appendix II (03/87)	This document corresponds to ITU-T Rec. G.722 Appendix II which was published in the Blue Book (1988). It includes one diskette containing the digital test sequences for the verification of the G.722 SB-ADPCM codec
G.722.1 (09/99)	This annex includes one CD-ROM containing the reference code and the test vectors for ITU-T G.722.1 algorithm implementation verification
G.722.1 Annex B (11/00) G.722.2 Annex C (01/02) G.722.2 Annex D (01/02)	
G.723.1 Annex A (11/96)	This annex includes 3 diskettes which are common to the Recommendation's main body and to this annex, and which contain test vectors and the C reference code for implementation verification of the G.723.1 fixed point dual rate speech coder for multimedia communications
G.723.1 Annex B (11/96)	This annex includes one CD-ROM containing the reference code and the test vectors for implementation verification of the G.723.1 floating point speech coder. The CD-ROM may be replaced on demand by 14 diskettes
G.723.1 Annex C (11/96)	This annex includes one diskette containing the reference code and the test vectors for implementation verification of the scalable channel coding scheme
G.726 Appendix II test vectors (03/91)	This document corresponds to ITU-T Rec. G.726 Appendix II. It includes 2 diskettes containing respectively the A-Law and $\mu\text{-Law}$ digital test sequences for the verification of the G.726 ADPCM codec implementations. The document reproduces the user guide published in the CCITT Collective Letter No. 11/XV (1991)
G.727 Appendix I test vectors (03/91)	This document corresponds to ITU-T Rec. G.727 Appendix I. It includes 6 diskettes containing digital test sequences for the verification of the G.727 embedded ADPCM codec implementations. The document reproduces the user guide published in the CCITT Collective Letter No. 12/XV (1991)

Series	Subject
G.728 Annex H (05/99)	This annex includes one CD-ROM containing the test data for verification of ITU-T Rec. G.728 Annex H low bit-rate LD-CELP implementations
G.728 Annex J (09/99)	This annex includes one CD-ROM containing the test vectors for verification of ITU-T Rec. G.728 Annex J variable bit-rate LD-CELP implementations
G.728 Appendix I	
Software (07/95)	This document corresponds to ITU-T Rec. G.728 Appendix I. It includes 4 diskettes containing programs and test sequences for verification of the floating point and fixed point implementations of the G.728 LD-CELP algorithm. The document reproduces the user guide published in the CCITT Collective Letter No. 17/XV (1992)
G.729 (03/96)	This Recommendation includes 3 diskettes containing source code and test sequences for implementation verification of the algorithm of the G.729 8 kbit/s CS-ACELP speech coder
G.729 Annex A (11/96)	This annex includes 3 diskettes containing source code and test sequences for implementation verification of the algorithm of the G.729 reduced complexity 8 kbit/s CS-ACELP speech coder
G.729 Annex B (02/00)	This Annex includes 1 electronic attachment containing source code and test sequences for implementation verification of the algorithm of the G.729 Silence compression scheme version 1.4, which reflects modifications given in Corrigendum 2 (02/2000)
G.729 Annex C (09/98)	This annex includes one diskette containing version 1.01 of reference C code for floating point implementation of the G.729 8 kbit/s CS-ACELP speech coder
G.729 Annex C+ (02/00)	This annex includes an electronic attachment containing version 2.1 of reference C code for floating point implementation of CS-ACELP at 6.4 kbit/s, 8 kbit/s and 11.8 kbit/s with DTX functionality
G.729 Annex D (02/00)	This Annex includes one electronic attachment containing version 1.3 of source C code for fixed point implementation of the G.729 6.4 kbit/s CS-ACELP speech coder, which reflects modifications given in Corrigendum 1 (02/2000)
G.729 Annex E (02/00)	This Annex includes one electronic attachment containing version 1.3 of source C code and test vectors for fixed point implementation of the G.729 11.8 kbit/s CS-ACELP speech coder, which reflects modifications given in Corrigendum 1 (02/2000)
G.729 Annex F (02/00)	This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s and 8 kbit/s with DTX functionality

Series	Subject
G.729 Annex G (02/00)	This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 8 kbit/s and 11.8 kbit/s with DTX functionality
G.729 Annex H (02/00)	This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s, 8 kbit/s and 11.8 kbit/s without DTX functionality
G.729 Annex I (02/00)	This annex includes an electronic attachment containing version 1.1 of reference C code and test vectors for fixed point implementation of CS-ACELP at 6.4 kbit/s, 8 kbit/s and 11.8 kbit/s with DTX functionality
G.763 (10/98)	This Recommendation includes 2 diskettes. The first one contains A-Law and $\mu\text{-Law}$ test vectors for DCME verification. The second one contains example transmit/receive SDLs
G.776.1 (10/98)	This Recommendation includes one diskette containing the information model of Signal Processing Network Elements (SPNE)
G.967.1 (06/98)	This Recommendation includes one diskette containing the SDL process diagrams corresponding to the VB5.1 reference point
G.967.2 (02/99)	This Recommendation includes one diskette containing the SDL process diagrams corresponding to the VB5.2 reference point
H.341 (05/99)	This Recommendation includes one diskette containing the formal descriptions of Annexes A, B, C, D and E for the multimedia management information base
H Supplement 1 (05/99)	This supplement includes one CD-ROM containing the video clip "Irene" to be used as test material for video coding of sign language
J.120 (05/00) J.170 (02/02) M.3120 (10/01)	
P Supplement 23 (02/98)	This supplement includes 3 CD-ROMs containing the ITU-T coded speech database for 8 kbit/s codec tests
P.50 Appendix I (02/98)	This appendix includes one CD-ROM containing the speech database for telephonometry applications
P.501 (05/00)	This Recommendation includes one CD-ROM containing test signals for telephonometry applications
P.561 Appendix III (02/98)	This appendix includes one CD-ROM containing digital speech recordings for INMD devices testing
P.834 (07/02)	

Series	Subject
P.861 (02/98) Withdrawn (07/01) P.862 (02/01)	This Recommendation includes one diskette containing test vectors for implementation verification of the PSQM algorithm
Q.765.1 <i>bis</i> (12/99)	
Q.784.2 (06/97)	This Recommendation includes one diskette containing Annex D ISUP'92 ATS for Basic Call in graphical and in machine processable form
Q.784.3 (12/99)	
Q.785.2 (03/99)	This Recommendation includes one CD-ROM containing the ISUP'97 ATS for Supplementary Services in machine processable form and in graphical form
Q.785.2 Amendment 1 (12/0	0)
Q.921 <i>bis</i> (03/93)	This Recommendation includes 5 diskettes containing postscript files of ATS for testing conformance of basic rate user side equipment to ITU-T Rec. Q.921
Q.933 <i>bis</i> (10/95)	This Recommendation includes one diskette containing Abstract test suites Section II corresponding to additional procedures for PVCs as per ITU-T Rec. Q.933 Annex A
Q.953.5 (12/99)	This Recommendation includes one diskette containing the SDL process diagrams of DSS1 CCNR in machine processable form
Q.1228 (09/97)	This Recommendation includes 3 diskettes containing ITU-T Rec. Q.1228 SDL diagrams in SDT source format and in PDF format
Q.1238.1 (06/00) Q.1238.2 (06/00) Q.1238.3 (06/00) Q.1238.4 (06/00) Q.1238.5 (06/00) Q.1238.6 (06/00) Q.1238.7 (06/00) Q.1238.7 (06/00) Q.1248.1 (07/01) Q.1248.2 (07/01) Q.1248.3 (07/01) Q.1248.4 (07/01) Q.1248.5 (07/01) Q.1248.6 (07/01) Q.1248.7 (07/01) Q.1248.7 (07/01) Q.1248.9 (07/01) Q.12991.1 (12/99) Q.2991.2 (12/99)	

Series Subject T.24 (06/98) This Recommendation includes 2 CD-ROMs containing the digitized image set T.24 Amendment 1 (02/00) T.83 (11/94) This Recommendation includes 3 diskettes containing compliance test data for the generic encoder and decoder compliance tests T.87 (06/98) This Recommendation includes one diskette containing the JPEG-LS compression Lossless and near-lossless image reference implementation and a conformance testing image set T.804 (08/02) T.870 (03/02) V.56 ter (08/96) This Recommendation includes 2 diskettes containing the data files used for the voiceband duplex modems throughput tests This annex includes one diskette containing the SDT files of the SDL X.633 Add.1 (09/98) specifications of the Network Fast Byte protocol X.634 Add.1 (09/98) This annex includes one diskette containing the SDT files of the SDL specifications of the Transport Fast Byte protocol

# ITU-T TEST CHARTS

The following is a list of the different test charts published by ITU-T, and intended to test different facsimile communication equipment. The test charts conform to severe quality constraints and are published separately. The specimens reproduced inside Recommendations are given for illustration purposes and are not suitable for measurements.

## T.22 (03/93) - Test Chart No. 4: Black and white facsimile test chart BW01

 $302 \times 222$  mm high contrast bi-level chart containing text in a variety of languages, fonts and pitches and various black and white patterns. This test chart exists in two qualities:

Test chart No. 4, high quality 4530 12 CHF

Test chart No. 4, standard quality 5494 5 CHF

## T.22 (03/93) - Test Chart No. 5: Continuous tone facsimile test chart CT01

 $279 \times 216$  mm gray scale chart containing several strips and patches of various gray scale levels, and two photographs.

Test chart No. 5 11941 26 CHF

# T.23 (04/94) - Test Chart No. 6: 4-colour printing facsimile test chart 4CP01

 $302 \times 222$  mm full colour chart printed from 4-colour separation negatives, containing a complete range of patterns, textures, shadings and bright and pastel colours.

*Test chart No.* 6 10465 9 CHF

# T.24 (06/98) - Standardized digitized image set on CD-ROM

This digitized test chart set is an integral part of Recommendation T.24 and is published with it. The 2 CD-ROMS include a set of digitized images with different resolutions:

- eight black and white ITU-T reference pages (the "CCITT images")
- test chart No. 4 (BW01)
- one legibility test chart
- seven bi-level half tones images made by processing gray scale images with different algorithms
- test chart No. 5 (CT01)
- two gray-scale images
- test chart No. 6 (4CP01)
- 14 colour images with different resolutions and in different coulour spaces (YUV, CMYK, RGB, CIELAB)
- low contrast gray scale images

Rec. + CD-ROM **E** 16670 **F** 9969 **S** 9970 154 CHF

# OTHER ITU-T PRODUCTS

# ITU Operational Bulletin (2003) (printed versions, electronic version and on-line service)

2003

The ITU Operational Bulletin is a fortnightly service publication, prepared under the responsibility of the Telecommunication Standardization Bureau (TSB). Published on the 1st and 15th of each month, it contains the administrative and operational information exchanged between administrations/ recognized operating agencies (ROAs) and other service providers, entities and organizations, in respect of the international telecommunication services made available to users, including information relating to the maritime mobile service. Various lists containing the codes, numbers or indicators allocated to countries and operators to meet the operational needs of international telecommunication services are published in annex to the Operational Bulletin.

Separate edition in E, F, S

385 CHF

Paper - On line - Electronic Bookshop

# **Lists annexed to Operational Bulletin**

#### Note from the TSB

The following Lists\* have been published by TSB or BR as Annexes to the ITU Operational Bulletin (OB):

OB No.	Title	Price
665	Various tones used in national networks (Supplement 2 to ITU-T Recommendation E.180) (Position on 1 April 1998)	20 CHF
669	Five-letter Code Groups for the use of the International Public Telegram Service (According to ITU-T Recommendation F.1 (03/98))	20 CHF
674	Status of Radiocommunications between Amateur Stations of different countries (In accordance with optional provision No. 2731 of the Radio Regulations) (Position on 15 August 1998)	20 CHF
691	Service Restrictions (Recapitulatory list of service restrictions in force relating to telecommunications operation) (Position on 1 May 1999)	20 CHF
693	List of Telex Destination Codes (TDC) and Telex Network Identification Codes (TNIC) (Complement to ITU-T Recommendations F.69 and F.68) (Position on 31 May 1999)	20 CHF
720	List of Data Country or Geographical Area Codes (Complement to ITU-T Recommendation X.121) (Position on 15 July 2000)	20 CHF
725	List of names of administration management domains (ADMD) (In accordance with ITU-T F.400 and X.400 series Recommendations) (Position on 30 September 2000)	20 CHF
737	List of signalling area/network codes (SANC) (Position on 1 April 2001)	20 CHF
739	List of ITU carrier codes (According to ITU-T Recommendation M.1400 (02/2000)) (Position on 1 May 2001)	20 CHF

OB No.	Title	Price
741	List of mobile country or geographical area codes (Position on 1 June 2001)	20 CHF
746	List of Data Network Identification Codes (DNIC) (According to ITU-T Recommendation X.121 (10/00)) (Position on 15 August 2001)	20 CHF
757	List of issuer identifier numbers for the international telecommunication charge card (in accordance with ITU-T Recommendation E.118) (Position on 1 February 2002)	20 CHF
759	Dialling Procedures (International prefix, national (trunk) prefix and national (significant) number) (In accordance with ITU-T Recommendation E.164 (05/97)) (Position on 1 March 2002)	20 CHF
761	List of international signalling point codes (ISPC) (According to ITU-T Recommendation Q.708 (03/99)) (Position on 1 april 2002)	20 CHF
763	List of ITU-T Recommendation E.164 assigned country codes (Complement to ITU-T Recommendation E.164 (05/1997)) (Position on 1 May 2002)	20 CHF
764	List of Telegram Destination Indicators (In accordance with ITU-T Recommendation F.32) (Position on 15 May 2002)	20 CHF
765	Access codes/numbers for mobile networks (According to ITU-T Recommendation E.164) (Position on 1 June 2002)	20 CHF
766	List of country or geographical area codes for non-standard facilities in telematic services (Position on 15 June 2002)	20 CHF
768	Status of Radiocommunications between amateur stations of different countries (In accordance with optional provision No. 25.1 of the Radio regulations) and	20 CHF
	Form of call signs assigned by each Administration to its amateur and experimental stations (Position on 15 June 2002)	
777	List of data network identification codes (DNIC) (According to ITU-T Recommendation X.121) (Position on 1 December 2002)	20 CHF
781	Various tones used in national networks (According to ITU-T Recommendation E.180)(03/1998) (Position on 1 February 2003)	20 CHF

<sup>\*</sup> For information, all lists will be updated by numbered series of amendments published in the ITU Operational Bulletin, and will be reissued as necessary.

Furthermore, the lists can be consulted on line by the subscribers:

<sup>(</sup>**www.itu.int/itu-t/bulletin/index.html**) in the ITU document database, under the heading "Operational Bulletin and Lists annexed".

# ITU-T Sancho – (ITU-T Sector Abbreviations and defiNitions for a teleCommunications tHesaurus Oriented database)

1999

SANCHO is a new database on CD-ROM that contains both "terms and definitions" and "abbreviations and acronyms" defined within ITU-T standardization publications. This is a unique and complete reference for definitions in the field of global telecommunications standardization.

CD-ROM Article **E** 16169 125 CHF

#### **Obsolete ITU-T Recommendations**

These are Recommendations which have been withdrawn or superseded by a new version.

- from the Electronic Bookshop Minimum charge: 20 CHF

from ITU-T Recommendations Online Service (included in subscription, please see above)

## **Pre-published ITU-T Recommendations**

These are Recommendations approved by the Members of the ITU-T Sector but not yet published. These texts do not include any editorial changes that might be made during the editing process. They are generally available in their original language only.

- from the Electronic Bookshop Minimum price: 20 CHF

 from ITU-T Recommendations Online Service (included in online subscription, please see above)

#### **ITU-T Activities**

Much more free information relating to ITU-T activities is available on the ITU-T Website at: www.itu.int/itu-t

# **Sales and Distribution**

ITU-T Recommendations are published in English, French and Spanish. Some of them are also available in Arabic, Chinese and Russian. They are distributed in the following formats:

## 1 ITU-T Recommendations on paper

ITU-T Recommendations currently in force are published in individual fascicles. Prices for these fascicles are based on the number of pages and vary according to the Recommendation. To order Recommendations, please complete the Order Form given on page 195.

#### 2 ITU-T Recommendations on CD-ROM

The *ITU-T Recommendations on CD-ROM* contains the complete collection of the Recommendations published and currently in force, and are available in two formats:

Recommendations as indexed and searchable documents in PDF format; and

- Disk 1 Recommendations in Adobe Acrobat<sup>TM</sup> Portable Document Format (PDF);
- Disk 2 Recommendations in their original Microsoft (MS) Word for Windows format.

These CD-ROMs also include pre-published Recommendations, subject to their availability at the time the CD-ROM is produced.

These CD-ROMs do not include certain software programmes associated with the Recommendations, which must be ordered and paid for separately.

The product is available in three separate versions: English, French and Spanish.

Separate editions are published in March, June, September and December of each year. Alternatively, subscriptions covering four consecutive editions may be taken out at any time.

Catalogue price for a single user is:

- 1,000 Swiss francs (CHF) for a single issue (published quarterly), and
- 2,800 Swiss francs (CHF) for a yearly subscription (covering 4 consecutive issues).

Price multipliers apply for *multi-user* environments, at the same location or at differents locations for customers who wish to subscribe for a larger number of authorised users. A ceiling price of 52,500 Swiss francs is applied for yearly subscriptions with more than 100 users.

To obtain this product, customers are invited to complete a License Agreement attached to Publication Notice No. 197-03 available from the Sales and Marketing Division or on the Web at:

www.itu.int/publications/cd-rom.htm

# 3 ITU-T Recommendations through



The *Electronic Bookshop* is ITU's publication online ordering and delivery service. It enables the customer to purchase ITU Publications and download them immediately from the ITU Website or by electronic mail. **ITU-T Recommendations in force,** both **published** and **pre-published**, as well as **superseded** ITU-T Recommendations, are available **individually** from the ITU *Electronic Bookshop*.

It is important to note that some discrepancies may exist between the pre-published Recommendation and the final edited version.

The system currently supports **realtime online payment** validation for Mastercard, VISA and American Express. With the new full-featured shopping basket, the client may now purchase as many publications as desired in a single credit card transaction. Once the transaction has gone through, the client also has the option to receive a receipt via fax.

The service runs on the Netscape Enterprise server. Due to security considerations, a browser which supports Netscape's SSL (Secure Sockets Layer) is required. All credit card details entered on the order form are encrypted when using Netscape's SSL protocol.

The price depends on the ITU-T Recommendation which is being ordered, although **there is a minimum of 20 Swiss francs (CHF) per document**. The price is indicated on the screen for each individual publication. No discounts are available via this service.

ITU offers free of charge the first three downloads of Recommendations per person per year from the Electronic Bookshop, including for non-members.

The *Electronic Bookshop* is accessible from the ITU Website at the following address:

www.itu.int/publications/

## 4 ITU-T Recommendations Online

The *ITU-T Recommendations Online* is an annual subscription service to the electronic versions of the Recommendations in force. Over 2,600 Recommendations are accessible in two formats:

- Recommendations in their *original* Word for Windows format.
- Recommendations in Adobe Acrobat PDF format.

As the approval and the publication of these Recommendations is a continuous process, the online collection is continuously revised and contains the most comprehensive and timely collection available in electronic form. This is a complete collection of all currently published valid ITU-T Recommendations. **Pre-published and recently superseded Recommendations are also available online**.

Recommendations in Word for Windows are best suited for reprocessing for some of the Recommendations, there is a brief summary that can be browsed online before downloading.

The Adobe Acrobat PDF (Portable Document Format) can be used on many different platforms (Windows 3.1, 95 and NT; Macintosh and Unix). PDF allows stable quality printout on almost any printer and on different paper sizes.

Subscriptions are made for a period of twelve months starting from the date on which the ITU provides the passwords.

English, French and Spanish versions are available within the same subscription service.

The catalogue price for a single user yearly subscription is 3,400 Swiss francs (CHF).

For *multi-user* environments, at the same location, price multipliers are 2 (up to 10 users), 4 (up to 25 users), 6 (up to 50 users) and 9 (up to 100 users). A ceiling price of 52,500 Swiss francs is applied for yearly subscriptions with more than 100 Authorized Users.

Upon request, special License Agreements are available for subsidiary/parent corporations as well as up-loading to a corporate-wide server.

To subscribe, customers are invited to complete a License Agreement attached to Publication Notice No. 198-8 available from the Sales and Marketing Division or on the ITU Website.

Since 1 January 2001, ITU offers one free subscription to Online Recommendations for one person per Member State or Sector Member.

This online service is accessible from the ITU Website at:

www.itu.int/publications/online.htm

## 5 General conditions of sale

#### Prices

The prices quoted in this List, as well as in the List of ITU-R Recommendations, the ITU Catalogue of Publications and in Publication Notices (distributed free of charge and visible on the ITU website at the following address: **www.itu.int/publications**) are in Swiss francs (CHF), and are subject to change without notice.

Discounts of 15% are granted to Member States and Sector Members participating in the work of ITU. A discount of 80% of the catalogue price on all ITU publications is granted to Administrations of the Least Developed Countries (LDCs), as well as to libraries of educational institutions (for online subscriptions and CD-ROM publications only).

Catalogue prices of electronic publications (on CD-ROM and online) are given for single users. For corporations and institutions, multi-user licences are granted taking into account the number of authorized users. Please refer to the corresponding Publication Notices on the Web. For a higher number of authorized users, the price multiplier is available on request. Please note that the minimum price for a publication bought from the Electronic Bookshop is twenty Swiss francs (CHF 20.–) and that there is no discount via this service.

# Methods of payment

All publications ordered from ITU must be paid for in advance. Payments can be made:

- a) by credit card: American Express, Eurocard/Mastercard, Visa;
- b) by bank transfer to UBS SA, Geneva, Account ITU Geneva, No. CH 96 0024 0240 C876 5565 0;
- c) by cheque made payable to ITU;
- d) by international postal order;
- e) to the ITU postal cheque account: ITU Geneva, No. 12-50-3 (from within Switzerland);
- f) or by UNESCO coupon.

Payments normally should be made in Swiss francs (CHF). Payments may also be made in other currencies, freely convertible into CHF, provided that, when converted by the bank, the price of the service in CHF is covered. ITU does not accept Letters of Credit.

For faster order processing, we invite you to either pre-pay by credit card or take advantage of a new service by opening an ITU deposit account.

#### Forms of dispatch

The catalogue price includes the cost of dispatch by non-registered economy-class mail or the means of carriage most advantageous to ITU. Dispatch can be requested in other forms: i.e. airmail, DHL, Federal Express, TNT, UPS or diplomatic pouch. If one of these alternative methods is chosen, the dispatch cost will be added to the quote. As from 1 February 2003, the costs of shipping via registered mail have been added to the economy-class costs. You may, if you wish, refuse these conditions but, in this case, ITU will not be held responsible for the replacement of any undelivered orders dispatched by mail that has not been registered. Customs duties and other taxes or dues levied on imported goods are not borne by ITU. ITU accepts **no responsibility** for delay, loss or damage in shipment. Any discrepancy or claim must be communicated to ITU within one year of dispatch of the publication(s).

## Return of publications

Where a publication found to be faulty is returned to ITU, the latter's responsibility shall be limited to replacement of the publication and payment of the costs arising from such replacement. Any publication returned to ITU as unwanted must reach it within one (1) month from the date of its dispatch to the customer, subject to ITU's prior agreement. A minimum charge of fifty Swiss francs (CHF 50.–) will normally be invoiced to the customer by ITU for return of the publication to stock.

No exchange or refund is available for purchases made directly at the ITU Bookshop.

In the case of electronic publications (CD-ROM and online), these general conditions shall apply, subject to the specific derogation provisions contained in the Licence Agreements. The placing of an order implies full acceptance of these general conditions of sale.

None of the provisions of these general conditions of sale shall be interpreted as constituting a derogation or renunciation of the privileges, immunities and facilities enjoyed by ITU in accordance with the international agreement applicable to it, in particular the Headquarters Agreement concluded with the Swiss Federal Council on 22 July 1971, as well as the Swiss law or any other relevant national legislation.

Please note that orders cannot be taken over the telephone.

They should be sent by telefax or electronic mail.

Please contact the ITU Sales and Marketing Division (see page 2) for any further information concerning prices, availability, or purchase of ITU-T Recommendations:

# International Telecommunication Union

Sales and Marketing Division

Place des Nations CH-1211 Geneva 20

Switzerland

Telephone: + 41 22 730 61 41 (English)

+ 41 22 730 61 42 (Français) + 41 22 730 61 43 (Español)

Telefax: + 41 22 730 51 94
Telex: 421000 uit ch
E-mail: sales@itu.int

Web: www.itu.int/publications



# **International Telecommunication Union** Sales and Marketing Division

+41 22 730 5194 Telefax:

KT U	Place d	des Nations 111 Geneva 20 – Switzerland		Telex: E-mail:	421 00 sales@		
Customer's b	illing addre	ess (please PRINT or type)					
Name of the Compa	any or Institutior	1					1
Division / Departme	ent		Name of Contact Pers	on			I
Street / Post Office	Вох						2
City, State			ZIP / Post Code				Irder Form
Country							Ć
Phone number		Telefax number		E-mail			
Preferred forn	m of shipme		Customer's ship	ping add	ress (if dif	ferent from a	bove)
Economy (free o	of charge)	Federal Express (Int. Acc. #)	Name of the Company	or Institutior	ı		
Economy registe		UPS (Int. Acc. #)	Division / Department				
☐ Airmail registere	ed	TNT	Street / Post Office Bo	×			
□ DHL (I	Int. Acc. #)	(Int. Acc. #)	City, State, ZIP / Post	Code		Country	
Method of pay	yment						
Cheque or mon	ney order of	Swiss francs enclosed	Bank transfer of		Swiss franc	cs to UBS SA, Gen b. CH 96 0024 024	eva, 0 C876 5565 0
Please charge		Swiss francs to my credit card account	American Express		Eurocard / Mas		Visa
Card number			Expiry date		Card-holder		
Please send i	me						
Article number		Publication title		Lang. code	Unit price	Quantity	Total CHF
		Please	continue overleaf				
confirm this	order	Please	continue overleaf				
l confirm this	order	Please	continue overleaf				
Cour order reference		Please Name of s					

Article number	Publication title	Lang.	Unit price	Quantity	Total CHF
			рисс		
					•
	Subtotal [economy dispatch (	tree of c	harge) inc	luded]	
TOTAL (with auticularisate phinains shows all autocally after a min mate)					
TOTAL (with optional priority shipping charge – please call or fax for a price quote)					