Geneva, 18 September 2013

|  |  |
| --- | --- |
| **Telecommunication StandardizationBureau** |  |
|  |  |

|  |  |  |
| --- | --- | --- |
| Ref:Tel:Fax: | **TSB Circular 55**+41 22 730 6206+41 22 730 5853  | - To Administrations of Member States of the Union |
| E-mail: | tsbdir@itu.int  | **Copy:**- To ITU-T Sector Members;- To ITU-T Associates;- To ITU-T Academia;- To the Chairmen and Vice-Chairmen of ITU-T Study Groups and TSAG;- To the Director of the Telecommunication Development Bureau;- To the Director of the Radiocommunication Bureau |

|  |  |
| --- | --- |
| Subject: | **Preliminary list of relevant ITU-T Recommendations referenced in International Telecommunication Regulations adopted by World Conference on International Telecommunications (Dubai, 2012) for review** |

Dear Sir/Madam,

1 The Final Acts of the World Conference on International Telecommunications (Dubai, 2012) refer to "ITU-T Recommendations" 23 times, among which 21 times in various articles of the International Telecommunication Regulations (ITRs) and their Appendices.

2 At the [Joint ATU-ITU Seminar on the outcomes of WTSA-12 and WCIT-12](http://www.itu.int/en/ITU-T/Workshops-and-Seminars/atu-itu/201307/Pages/default.aspx)held in Durban, South Africa, 10-11 July 2013, it was suggested that it would be helpful to the ITU membership if TSB were to provide a list of exactly which Recommendations are relevant for specific articles.

3 To this end, a preliminary list of relevant ITU-T Recommendations referenced in ITRs has been identified by ITU-T Study Group Counsellors, with help from the ITU-T Study Group management team, and it is hereto attached in **Annex 1** for your information and review.

4 I hope this will prove useful and would appreciate any feedback and comments.

Yours faithfully,

Malcolm Johnson
Director of the Telecommunication
Standardization Bureau

**Annex**: 1

# ANNEX 1

(to TSB Circular 55)

# Preliminary list of relevant ITU-T Recommendations referenced in ITRs

|  |  |
| --- | --- |
| **INTERNATIONAL TELECOMMUNICATIONREGULATIONS** | **Relevant ITU-T Recommendations**  |
| **PREAMBLE** |  |
| **1** While the sovereign right of each State to regulate its telecommunications is fully recognized, the provisions of the present International Telecommunication Regulations (hereafter referred to as "Regulations") complement the Constitution and the Convention of the International Telecommunication Union, with a view to attaining the purposes of the International Telecommunication Union in promoting the development of telecommunication services and their most efficient operation while harmonizing the development of facilities for worldwide telecommunications.  |  |
| **2** Member States affirm their commitment to implement these Regulations in a manner that respects and upholds their human rights obligations. |  |
| **3** These Regulations recognize the right of access of Member States to international telecommunication services. |  |
| Article 1 |  |
| **Purpose and scope of the Regulations** |  |
| **4** 1.1 *a)* These Regulations establish general principles which relate to the provision and operation of international telecommunication services offered to the public as well as to the underlying international telecommunication transport means used to provide such services. These Regulations do not address the content-related aspects of telecommunications.  |  |
| **5** *b)* These Regulations also contain provisions applicable to those operating agencies, authorized or recognized by a Member State, to establish, operate and engage in international telecommunications services to the public, hereinafter referred as "authorized operating agencies". |  |
| **6** *c)* These Regulations recognize in Article 13 the right of Member States to allow special arrangements. |  |
| **7** 1.2 In these Regulations, "the public" is used in the sense of the population, including governmental and legal bodies. |  |
| **8** 1.3 These Regulations are established with a view to facilitating global interconnection and interoperability of telecommunication facilities and to promoting the harmonious development and efficient operation of technical facilities, as well as the efficiency, usefulness and availability to the public of international telecommunication services. |  |
| **9** 1.4 References to Recommendations of the ITU Telecommunication Standardization Sector (ITU-T) in these Regulations are not to be taken as giving to those Recommendations the same legal status as these Regulations. |  |
| **10** 1.5 Within the framework of these Regulations, the provision and operation of international telecommunication services in each relation is pursuant to mutual agreement between authorized operating agencies. |  |
| **11** 1.6 In implementing the principles of these Regulations, authorized operating agencies should comply with, to the greatest extent practicable, the relevant ITU-T Recommendations. |  |
| **12** 1.7 *a)* These Regulations recognize the right of any Member State, subject to national law and should it decide to do so, to require that authorized operating agencies which operate in its territory and provide an international telecommunication service to the public be authorized by that Member State. |  |
| **13** *b)* The Member State concerned shall, as appropriate, encourage the application of relevant ITU-T Recommendations by such service providers. |  |
| **14** *c)* The Member States, where appropriate, shall cooperate in implementing these Regulations. |  |
| **15** 1.8 These Regulations shall apply, regardless of the means of transmission used, so far as the Radio Regulations do not provide otherwise. |  |
| Article 2 |  |
| **Definitions** |  |
| **16** 2.1 For the purpose of these Regulations, the following definitions shall apply. These terms and definitions do not, however, necessarily apply for other purposes. |  |
| **17** 2.2 *Telecommunication:* Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems. |  |
| **18** 2.3 *International telecommunication service:* The offering of a telecommunication capability between telecommunication offices or stations of any nature that are in or belong to different countries. |  |
| **19** 2.4 *Government telecommunications:* Telecommunications originating with any: Head of State; Head of a government or members of a government; Commanders-in-Chief of military forces, land, sea or air; diplomatic or consular agents; the Secretary-General of the United Nations; Heads of the principal organs of the United Nations; the International Court of Justice, or replies to government telecommunications mentioned above. |  |
| **20** 2.5 *Service telecommunication:* A telecommunication that relates to public international telecommunications and that is exchanged among the following:– Member States;– – authorized operating agencies; and– – the Chairman of the Council, the Secretary-General, the Deputy Secretary-General, the Directors of the Bureaux, the members of the Radio Regulations Board, and other representatives or authorized officials of the Union, including those working on official matters outside the seat of the Union. |  |
| **21** 2.6 *International route:* Technical facilities and installations located in different countries and used for telecommunication traffic between two international telecommunication terminal exchanges or offices. |  |
| **22** 2.7 *Relation:* Exchange of traffic between two terminal countries, always referring to a specific service, if there is between their authorized operating agencies: |  |
| **23** *a)* a means for the exchange of traffic in that specific service:– over direct circuits (direct relation), or– via a point of transit in a third country (indirect relation), and**24** *b)* normally, the settlement of accounts. |  |
| **25** 2.8 *Accounting rate:* The rate agreed between authorized operating agencies, in a given relation that is used for the establishment of international accounts. |  |
| **26** 2.9 *Collection charge:* The charge established and collected by an authorized operating agency from its customers for the use of an international telecommunication service. |  |
| Article 3 |  |
| **International network** |  |
| **27** 3.1 Member States shall endeavour to ensure that authorized operating agencies cooperate in the establishment, operation and maintenance of the international network to provide a satisfactory quality of service. |  |
| **28** 3.2 Member States shall endeavour to ensure the provision of sufficient telecommunication facilities to meet the demand for international telecommunication services. |  |
| **29** 3.3 Authorized operating agencies shall determine by mutual agreement which international routes are to be used. Pending agreement and provided that there is no direct route existing between the terminal authorized operating agencies concerned, the origin authorized operating agency has the choice to determine the routing of its outgoing telecommunication traffic, taking into account the interests of the relevant transit and destination authorized operating agencies. |  |
| **30** 3.4 Subject to national law, any user, by having access to the international network, has the right to send traffic. A satisfactory quality of service should be maintained to the greatest extent practicable, corresponding to the relevant ITU-T Recommendations. | For QoS related ITU-T Recommendations see Article §4.3  |
| **31** 3.5 Member States shall endeavour to ensure that international telecommunication numbering resources specified in ITU-T Recommendations are used only by the assignees and only for the purposes for which they were assigned; and that unassigned resources are not used. | ITU-T E-series Recommendation: Overall network operation, telephone service, service operation and human factor, in particular:* E.101: Definitions of terms used for identifiers (names, numbers, addresses and other identifiers) for public telecommunication services and networks in the E-series Recommendations
* E.118 The international telecommunication charge card
* E.156 Guidelines for ITU-T action on reported misuse of E.164 number resources
* E.164: The international public telecommunication numbering
* E.164.1 Criteria and procedures for the reservation, assignment and reclamation of E.164 country codes and associated identification codes (ICs)
* E.164.2 E.164 numbering resources for trials
* E.164.3 Principles, criteria and procedures for the assignment and reclamation of E.164 country codes and associated identification codes for groups of countries
* E.168: Application of E.164 numbering plan for UPT
* E.168.1 Assignment procedures for universal personal telecommunications (UPT) numbers in the provisioning of the international UPT service
* E.169: Application of E.164 numbering plan for universal international numbers for international telecommunications services using country codes for global service"
* E.169.1: Application of Recommendation E.164 numbering plan for universal international freephone numbers for international freephone service
* E.169.2: Application of Recommendation E.164 numbering plan for universal international premium rate numbers for the international premium rate service
* E.169.3: Application of Recommendation E.164 numbering plan for universal international shared cost numbers for the international shared cost service
* E.190: Principles and responsibilities for the management, assignment and reclamation of E-Series international numbering resources
* E.191: B-ISDN addressing
* E.191.1: Criteria and procedures for the allocation of the ITU-T International Network Designator addresses
* E.193: E.164 country code expansion
* E.212: Network operational principles for future public mobile systems and services
* E.1100: Specification of an international numbering resource for use in the provisioning of international help lines
* E.1110: Allocation and assignment of ITU-T E.164 country code 888
 |
| **32** 3.6 Member States shall endeavour to ensure that international calling line identification (CLI) information is provided taking into account the relevant ITU-T Recommendations. | * E.157 International calling party number delivery
* I.251.3 Calling Line Identification Presentation.
* I.251.4 Calling Line Identification Restriction.
* I.251.7 Malicious Call Identification.
* Q.81.3: Calling line identification presentation (CLIP) and calling line identification restriction (CLIR) : Stage 2 description for number identification supplementary services
* Q.81.4: Calling line identification restriction (CLIR) : Stage 2 description for number identification supplementary services
* Q.731.3: Calling line identification presentation (CLIP) : Stage 3 description for number identification supplementary services using Signalling System No. 7
* Q.731.4: Calling line identification restriction (CLIR) : Stage 3 description for number identification supplementary services using Signalling System No. 7
* Q.951.3: Calling line identification presentation : Stage 3 description for number identification supplementary services using DSS 1
* Q.951.4: Calling line identification restriction : Stage 3 description for number identification supplementary services using DSS 1
* Q.2951.3: Calling Line Identification Presentation (CLIP) : Stage 3 description for number identification supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS2 ) – Basic Call
* Q.2951.4: Calling Line Identification Restriction (CLIR) : Stage 3 description for number identification supplementary services using B-ISDN digital subscriber signalling system No. 2 (DSS2 ) – Basic Call
* Q.731 Stage 3 description for number identification supplementary services using Signalling System No. 7.
* Q.731.7 Stage 3 description for number identification supplementary services using Signalling System No. 7: Malicious call identification (MCID).
* Q.764: Signalling System No. 7 – ISDN user part signalling procedures.
* Q.1912.5: Interworking between Session Initiation Protocol (SIP) and Bearer Independent Call Control protocol or ISDN User Part.
 |
| **33** 3.7Member States should create an enabling environment for the implementation of regional telecommunication traffic exchange points, with a view to improving quality, increasing the connectivity and resilience of networks, fostering competition and reducing the costs of international telecommunication interconnections. |  |
| Article 4 |  |
| **International telecommunication services** |  |
| **34** 4.1 Member States shall promote the development of international telecommunication services and shall foster their availability to the public. |  |
| **35** 4.2 Member States shall endeavour to ensure that authorized operating agencies cooperate within the framework of these Regulations to provide, by agreement, a wide range of international telecommunication services which should conform, to the greatest extent practicable, to the relevant ITU-T Recommendations. | * E.104: International telephone directory assistance service and public access
* E.105: International telephone service
* E.116: International telecommunication charge card service
* E.140: Operator-assisted telephone service
* E.151: Telephone conference calls
* E.152: International freephone service
* E.153: Home country direct
* E.154: International Shared Cost Service
* E.155: International Premium Rate Service
* E.202: Network operational principles for future public mobile systems and services
* F series: Non-telephone telecommunication services
* F.1-F.109: Telegraph service
* F.110-F.159: Mobile service
* F.160-F.399: Telematic services
* F.400-F.499: Message handling services
* F.500-F.549: Directory services
* F.550-F.599: Document communication
* F.600-F.699: Data transmission services
* F.700-F.799: Audiovisual services
* F.800-F.849: ISDN services
* F.850-F.899: Universal personal telecommunication
 |
| **36** 4.3 Subject to national law, Member States shall endeavour to ensure that authorized operating agencies provide and maintain, to the greatest extent practicable, a satisfactory quality of service corresponding to the relevant ITU-T Recommendations with respect to: | * E.420- E.479: Checking the quality of the international telephone service
* E.800- E.859
* ITU-T G.100-series: International telephone connections and circuits, except G.160-, G.180- and G.190-series
* G.1000-series: Multimedia Quality of Service and performance – Generic and user-related aspects
* I.350-series: Performance objectives (including ITU-T Y.1501/ ITU-T G.820/ ITU-T I.351)
* I.371 : Traffic control and congestion control in B-ISDN
* I.378 : Traffic control and congestion control at the ATM Adaptation Layer type 2
* I.381 : ATM adaptation layer (AAL) Performance
* P-series : Terminals and subjective and objective assessment methods
* Y.1220-series: Architecture, access, network capabilities and resource management
* Y.1500--series: Quality of service and network performance
* J.140-J.149; J.240-J.249; J.340-J.349: Measurement of the quality of service
* J.163: Dynamic quality of service for the provision of real-time services over cable television networks using cable modems
* J.174: IPCablecom interdomain quality of service
* J.368: IPCablecom2 quality of service specification
* Q.2723.1: B-ISDN user part – Support of additional traffic parameters for sustainable cell rate and quality of service
* Q.2965.1: Digital subscriber signalling system No. 2 – Support of Quality of Service classes
* Q.2965.1 B: Digital subscriber signalling system No. 2 – Support of Quality of Service classes: Protocol Implementation Conformance Statement (PICS) proforma
* Q.2965.2: Digital subscriber signalling system No. 2 – Signalling of individual Quality of Service parameters
* Q.2965.2 B: Digital subscriber signalling system No. 2 – Signalling of individual Quality of Service parameters: Protocol Implementation Conformance Statement (PICS) proforma
* Q.3309: QoS coordination protocol
* Q.3313: Signalling protocols and procedures relating to flow state aware QoS control in a bounded subnetwork of a next generation network
* Q.3925: Traffic flow types for testing quality of service parameters on model networks
* Q Suppl.51: Signalling requirements for IP-QoS
* Y.2211: IMS-based real-time conversational multimedia services over NGN
* Y.2212: Requirements of managed delivery services
* Y.2213: NGN service requirements and capabilities for network aspects of applications and services using tag-based identification
* Y.2214: Service requirements and functional models for customized multimedia ring services
* Y.2215: Requirements and framework for the support of VPN services in NGN, including the mobile environment
* Y.2216: NGN capability requirements to support the multimedia communication centre service
* Y.2221: Requirements for support of ubiquitous sensor network (USN) applications and services in the NGN environment
* Y.2222: Sensor control networks and related applications in next generation network environment
* Y.2232: NGN convergence service model and scenario using web services
* Y.2234: Open service environment capabilities for NGN
* Y.2235: Converged web-browsing service scenarios in NGN
* Y.2236: Framework for NGN support of multicast-based services
* Y.2237: Functional model and service scenarios for QoS-enabled mobile VoIP service
* Y.2240: Requirements and capabilities for next generation network service integration and delivery environment
* Y.2251: Multi-connection requirements
* Y.2261: PSTN/ISDN evolution to NGN
* Y.2262: PSTN/ISDN emulation and simulation
* Y.2271: Call server-based PSTN/ISDN emulation
* Y.2281: Framework of networked vehicle services and applications using NGN
* Y.2291: Architectural overview of next generation home networks
 |
| **37** *a)* access to the international network by users using terminals which are permitted to be connected to the network and which do not cause harm to technical facilities and personnel; |  |
| **38** *b)* international telecommunication facilities and services available to users for their dedicated use; |  |
| **39** *c)* at least a form of telecommunication service which is reasonably accessible to the public, including those who may not be subscribers to a specific telecommunication service; and |  |
| **40** *d)* a capability for interworking between different services, as appropriate, to facilitate international telecommunication services. |  |
| **41** 4.4 Member States shall foster measures to ensure that authorized operating agencies provide free-of-charge, transparent, up-to-date and accurate information to end users on international telecommunication services, including international roaming prices and the associated relevant conditions, in a timely manner. |  |
| **42** 4.5 Member States shall foster measures to ensure that telecommunication services in international roaming of satisfactory quality are provided to visiting users. |  |
| **43** 4.6 Member States should foster cooperation among authorized operating agencies in order to avoid and mitigate inadvertent roaming charges in border zones. |  |
| **44** 4.7Member States shall endeavour to promote competition in the provision of international roaming services and are encouraged to develop policies that foster competitive roaming prices for the benefit of end users. |  |
| Article 5 |  |
| **Safety of life and priority of telecommunications** |  |
| **45** 5.1 Safety-of-life telecommunications, such as distress telecommunications, shall be entitled to transmission as of right and, where technically practicable, have absolute priority over all other telecommunications, in accordance with the relevant articles of the Constitution and the Convention and taking due account of the relevant ITU-T Recommendations. | * E.106: International Emergency Preference Scheme (IEPS) for disaster relief operations
* E.107: Emergency Telecommunications Service (ETS) and interconnection framework for national implementations of ETS
* Q.761 Amd.2 and Amd3: Signalling System No. 7 – ISDN User Part functional description: Support for the International Emergency Preference Scheme
* Q.762 Amd1 and Amd3: Signalling System No. 7 – ISDN User Part general functions of messages and signals: Support for the International Emergency Preference Scheme
* Q.763 Amd2 and Amd4: Signalling System No. 7 – ISDN User Part formats and codes: Support for the International Emergency Preference Scheme
* Q.764 Amd2 and Amd4: [Signalling System No. 7 – ISDN User Part signalling procedures](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=4789): Support for the International Emergency Preference Scheme
* Q.767 Amd1: Application of the ISDN User Part of CCITT signalling system No. 7 for international ISDN interconnections: Support for the International Emergency Preference Scheme
* Q.1902.1 Amd1 and Amd2: Bearer Independent Call Control protocol (Capability Set 2): Functional description: Support for the International Emergency Preference Scheme
* Q.1902.2 Amd1 and Amd3: Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No.7 ISDN User Part: General functions of messages and parameters: Support for the International Emergency Preference Scheme
* Q.1902.3 Amd1 and Amd3: Bearer Independent Call Control protocol (Capability Set 2) and Signalling System No.7 ISDN User Part: Formats and codes: Support for the International Emergency Preference Scheme
* Q.1902.4 Amd1 and Amd3: Bearer independent call control protocol (Capability Set 2): Basic call procedures: Support for the International Emergency Preference Scheme
* Q.1950 Amd1: Bearer independent call bearer control protocol: New Annex G – Call bearer control – International Emergency Preference Scheme
* Q.2630.3 Amd1: AAL type 2 signalling protocol – Capability Set 3: Support for the International Emergency Preference Scheme
* Q.2761 Amd1: Functional description of the B-ISDN user part (B-ISUP) of signalling system No. 7: Support for the International Emergency Preference Scheme
* Q.2762 Amd1: General functions of messages and signals of the B-ISDN User Part (B-ISUP) of Signalling System No. 7: Support for the International Emergency Preference Scheme
* Q.2763 Amd1: Signalling System No. 7 B-ISDN User Part (B-ISUP) – Formats and codes: Support for the International Emergency Preference Scheme
* Q.2764 Amd1: Signalling System No. 7 B-ISDN User Part (B-ISUP) – Basic call procedures: Support for the International Emergency Preference Scheme
* Q.2931 Amd5: Digital Subscriber Signalling System No. 2 – User-Network Interface (UNI) layer 3 specification for basic call/connection control: Support for the International Emergency Preference Scheme
* Q Suppl. 47: Emergency services for IMT-2000 networks – Requirements for harmonization and convergence
* Q Suppl. 53: Signalling requirements to support the International Emergency Preference Scheme (IEPS)
* [Q Suppl. 57: Signalling requirements to support the emergency telecommunications service (ETS) in IP networks](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=9361)
* Q Suppl.62: Overview of the work of standards development organizations and other organizations on emergency telecommunications service
* Q Suppl. 63: Signalling protocol Mappings in support of Emergency Telecommunications Service in IP Networks
* Y.2205: Next Generation Networks – Emergency telecommunications – Technical considerations
* Y.1271: Framework(s) on network requirements and capabilities to support emergency telecommunications over evolving circuit-switched and packet-switched networks
* Y.2705: Minimum security requirements for the interconnection of the Emergency Telecommunications Service (ETS)
 |
| **46** 5.2 Government telecommunications, including telecommunications relative to the application of certain provisions of the United Nations Charter, shall, where technically practicable, enjoy priority over telecommunications other than those referred to in No. 45 (5.1) above, in accordance with the relevant provisions of the Constitution and the Convention and taking due account of the relevant ITU-T Recommendations. | Same as for Article §5.1, see above. |
| **47** 5.3 The provisions governing the priority enjoyed by any other telecommunication services are contained in the relevant ITU-T Recommendations. | Those listed above for Article §5.1, plus Y.3001: Future networks: Objectives and design goals. |
| **48** 5.4 Member States should encourage authorized operating agencies to inform all users, including roaming users, in good time and free of charge, of the number to be used for calls to the emergency services. |  |
| Article 6 |  |
| **Security and robustness of networks**  |  |
| **49** 6.1 Member States shall individually and collectively endeavour to ensure the security and robustness of international telecommunication networks in order to achieve effective use thereof and avoidance of technical harm thereto, as well as the harmonious development of international telecommunication services offered to the public. |  |
| Article 7 |  |
| **Unsolicited bulk electronic communications** |  |
| **50** 7.1 Member States should endeavour to take necessary measures to prevent the propagation of unsolicited bulk electronic communications and minimize its impact on international telecommunication services. |  |
| **51** 7.2 Member States are encouraged to cooperate in that sense. |  |
| Article 8 |  |
| **Charging and accounting** |  |
| **52 8.1 International telecommunication arrangements** |  |
| **53** 8.1.1 Subject to applicable national law, the terms and conditions for international telecommunication service arrangements may be established through commercial agreements or through accounting-rate principles established pursuant to national regulation. |  |
| **54** 8.1.2 Member States shall endeavour to encourage investments in international telecommunication networks and promote competitive wholesale pricing for traffic carried on such telecommunication networks. |  |
| **55 8.2 Accounting-rate principles** |  |
| **56** ***Terms and conditions*** |  |
| **57** 8.2.1 The following provisions may apply where the terms and conditions of international telecommunication service arrangements are established through accounting-rate principles, established pursuant to national regulation. These provisions do not apply to arrangements established through commercial agreements. |  |
| **58** 8.2.2 For each applicable service in a given relation, authorized operating agencies shall, by mutual agreement, establish and revise accounting rates to be applied between them, in accordance with the provisions of Appendix 1 and taking into account the relevant ITU-T Recommendations. |  D.1-D.299: General tariff principles, in particular D.150 New system for accounting in international telephony and D.195 Time-scale for settlement of accounts for international telecommunication services |
| **59** 8.2.3 Unless otherwise agreed, parties engaged in the provision of international telecommunication services shall follow the relevant provisions as set out in Appendices 1 and 2. |  |
| **60** 8.2.4 In the absence of special arrangements concluded between authorized operating agencies, the monetary unit to be used in the composition of accounting rates for international telecommunication services and in the establishment of international accounts shall be: |  |
| – either the monetary unit of the International Monetary Fund (IMF), currently the Special Drawing Right (SDR), as defined by that organization; |  |
| – or freely convertible currencies or other monetary unit agreed between the authorized operating agencies. |  |
| **61** ***Collection charges*** |  |
| **62** 8.2.5 The charges levied on customers for a particular communication should in principle be the same in a given relation, regardless of the international route used for that communication. In establishing these charges, Member States should try to avoid dissymmetry between the charges applicable in each direction of the same relation. |  |
| **63 8.3 Taxation** |  |
| **64** 8.3.1 Where, in accordance with the national law of a country, a fiscal tax is levied on collection charges for international telecommunication services, this tax shall normally be collected only in respect of international services billed to customers in that country, unless other arrangements are made to meet special circumstances. |  |
| **65 8.4 Service telecommunications** |  |
| **66** 8.4.1 Authorized operating agencies may in principle forego the inclusion of service telecommunications in international accounting, under the relevant provisions of the Constitution and the Convention and these Regulations, having due regard for the need for reciprocal arrangements. Authorized operating agencies may provide service telecommunications free of charge. |  |
| **67** 8.4.2 The general operational, charging and accounting principles applicable to service telecommunications should take account of the relevant ITU-T Recommendations. | * D.192: Principles for charging and accounting of service telecommunications
* Y.2111: Resource and admission control functions in next generation networks
* Y.2112: A QoS control architecture for Ethernet-based IP access networks
* Y.2113: Ethernet QoS control for next generation networks (on how technically to count traffic)
 |
| Article 9 |  |
| **Suspension of services** |  |
| **68** 9.1 If a Member State exercises its right in accordance with the Constitution and the Convention to suspend international telecommunication services partially or totally, that Member State shall immediately notify the Secretary-General of the suspension and of the subsequent return to normal conditions by the most appropriate means of communication. |  |
| **69** 9.2 The Secretary-General shall immediately bring such information to the attention of all other Member States, using the most appropriate means of communication. |  |
| Article 10 |  |
| **Dissemination of information** |  |
| **70** 10.1 Using the most suitable and economical means, the Secretary-General shall disseminate information provided, of an administrative, operational, or statistical nature, concerning international telecommunication services. Such information shall be disseminated in accordance with the relevant provisions of the Constitution and the Convention and of this Article, on the basis of decisions taken by the Council or by competent ITU conferences, and taking account of conclusions or decisions of ITU assemblies. If so authorized by the Member State concerned, the information may be transmitted to the Secretary-General directly by an authorized operating agency, and shall then be disseminated by the Secretary-General. Member States should transmit such information to the Secretary-General in a timely manner, taking into account the relevant ITU-T Recommendations. | * E.118: The international telecommunication charge card
* E.129: Presentation of national numbering plans
* E.156: Guidelines for ITU-T action on reported misuse of E.164 number resources
* E.164: The international public telecommunication numbering plan
* E.164.1: Criteria and procedures for the reservation, assignment and reclamation of E.164 country codes and associated identification codes (ICs)
* E.164.2: E.164 numbering resources for trials
* E.164.3: Principles, criteria and procedures for the assignment and reclamation of E.164 country codes and associated identification codes for groups of countries
* E.168: Application of E.164 numbering plan for UPT
* E.168.1: Assignment procedures for universal personal telecommunications (UPT) numbers in the provisioning of the international UPT service
* E.169: Application of Recommendation E.164 numbering plan for universal international numbers for international telecommunications services using country codes for global services
* E.169.1: Application of Recommendation E.164 numbering plan for universal international freephone numbers for international freephone service
* E.169.2: Application of Recommendation E.164 numbering plan for universal international premium rate numbers for the international premium rate service
* E.169.3: Application of Recommendation E.164 numbering plan for universal international shared cost numbers for international shared cost service
* E.180/Q.35: Technical characteristics of tones for the telephone service
* E.191.1: Criteria and procedures for the allocation of ITU-T International Network Designator addresses
* E.212: The international identification plan for public networks and subscriptions
* E.218: Management of the allocation of terrestrial trunk radio Mobile Country Codes
* Q.708: Assignment procedures for international signalling point codes
* X.121: International numbering plan for public data networks
* X.125: 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
* M.1400: Designations for interconnections among operators' networks
* F.400/X.400: Message handling system and service overview
* F.32: Telegram destination indicators
* F.68: Establishment of the automatic intercontinental telex network
* F.69: The international telex service – Service and operational provisions of telex destination codes and telex network identification codes
* T.35: Procedure for the allocation of ITU-T defined codes for non-standard facilities
* F.1: Operational provisions for the international public telegram service
* F.170: Operational provisions for the international public facsimile service between public bureaux (Bureaufax)
 |
| Article 11 |  |
| **Energy efficiency/e-waste** |  |
| **71** 11.1 Member States are encouraged to adopt energy-efficiency and e-waste best practices taking into account the relevant ITU-T Recommendations. | ITU-T L-1000 series, in particular:* L.1000: Universal power adapter and charger solution for mobile terminals and other hand-held ICT devices
* L.1001: External universal power adapter solutions for stationary information and communication technology devices
* L.1100: Procedure for recycling rare metals in information and communication technology goods
* L.1200: Direct current power feeding interface up to 400 V at the input to telecommunication and ICT equipment
* L.1300: Best practices for green data centres
* L.1310: Energy efficiency metrics and measurement methods for telecommunication equipment
* L.1400: Overview and general principles of methodologies for assessing the environmental impact of information and communication technologies
* L.1410: Methodology for the assessment of the environmental impact of information and communication technology goods, networks and services
* L.1420: Methodology for energy consumption and greenhouse gas emissions impact assessment of information and communication technologies in organizations
* Y.3022: Energy measurement of networks (on energy savings)
 |
| ARTICLE 12 |  |
| **Accessibility** |  |
| **72** 12.1 Member States should promote access for persons with disabilities to international telecommunication services, taking into account the relevant ITU-T Recommendations. | * E.121: Pictograms, symbols and icons to assist users of the telephone and telefax services
* E.123: Notation for national and international telephone numbers, e-mail addresses and web addresses
* E.135: Human factors aspects of public telecommunication terminals for people with disabilities
* E.138: Human factors aspects of public telephones to improve their usability for older people
* E.139: Public Internet access points
* V.18: Operational and interworking requirements for DCEs operating in the text telephone mode
* V.151: Procedures for the end-to-end connection of analogue PSTN text telephones over an IP network utilizing text relay
* V.254: Asynchronous serial command interface for assistive and multi-functional communication devices
* T.140: Protocol for multimedia application text conversation
* T.134: Text chat application entity
* H.323: Annex G for text conversation in H.323 packet multimedia environment
* H.248.2: Gateway control protocol: Facsimile, text conversation and call discrimination packages
* F.790: Telecommunications accessibility guidelines for older persons and persons with disabilities

Recommendations in which accessibility is integrated:* Sections on accessibility were included in NGN R1 Scope Y.2000SerSup1
* Definition in F.703 of Total Conversation and Text Telephony services, offering real-time text, video and audio communication
* Definition of the real-time conversational text medium in F.700
* Inclusion in H.320 of real-time text conversation in ISDN multimedia
* Section on transport of real-time text in ISDN multimedia environments in H.224
* Sections on modem negotiation for text telephony in V.8
* Sections in V.8 bis on modem negotiation for text telephony
* Sections in V.250 on control of V.18 modems
* Inclusion in H.324 of real time text conversation in circuit switched multimedia
* Section in H.245 for handling real-time text connections in H.324 and H.323 multimedia environments
* Inclusion in T.120 of real-time text in data conferencing
* Section in T.124 for handling real-time text sessions in the T.120 environment
* Section in G.168 for testing of echo cancellation in calls with text telephony
* Section in F.724 for accessible media additions in service description and requirements for video telephony services over IP networks
* Section in F.733 for accessible media additions in multimedia conference services over IP
* Section in F.742 for accessible media additions in service description and requirements for distance learning services
* Section in F.741 for accessible media additions in service description and requirements for audiovisual on demand services
* Inclusion in V.152 of text telephony considerations in voice band data gateway procedures
* Y.1910 on IPTV requirements includes accessibility
* Q.1741.x-series
* Y.2007: NGN capability set 2
* Y.2281: Framework of networked vehicle services and applications using NGN

Non-normative materials:* H Series Supplement 1 Requirements on video communication for sign language and lip reading
* Telecommunication Accessibility Checklist for standards writers
 |
| Article 13 |  |
| **Special arrangements** |  |
| **73** 13.1 *a)* Pursuant to Article 42 of the Constitution, special arrangements may be entered into on telecommunication matters which do not concern Member States in general. Subject to national laws, Member States may allow authorized operating agencies or other organizations or persons to enter into such special mutual arrangements with Member States and authorized operating agencies, or other organizations or persons that are so allowed in another country for the establishment, operation and use of special international telecommunication networks, systems and services, in order to meet specialized international telecommunication needs within and/or between the territories of the Member States concerned, and including, as necessary, the financial, technical or operating conditions to be observed. |  |
| **74** *b)* Any such special arrangements shall endeavour to avoid technical harm to the operation of the telecommunication facilities of third countries. |  |
| **75** 13.2 Member States should, where appropriate, encourage the parties to any special arrangements that are made pursuant to No. 73 (13.1) above to take into account relevant provisions of ITU-T Recommendations. | * D.50: International Internet connection
* D.98: Charging in international mobile roaming service
* D.99: Indicative rate for international mobile termination
* D.156: Network externalities
* D.271: Charging and accounting principles for NGN
* [E.112: Arrangements to be made for controlling the telephone services between two countries](http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=362)
* Y.2001: General overview of NGN
* Y.2002: Overview of ubiquitous networking and of its support in NGN
* Y.2011: General principles and general reference model for Next Generation Networks
* Y.2013: Converged services framework functional requirements and architecture (on network set up)
 |
| Article 14 |  |
| **Final provisions** |  |
| **76** 14.1 These Regulations, of which Appendices 1 and 2 form integral parts, shall enter into force on 1 January 2015, and shall be applied as of that date, consistent with all the provisions of Article 54 of the Constitution. |  |
| **77** 14.2 If a Member State makes reservations with regard to the application of one or more of the provisions of these Regulations, other Member States shall be free to disregard the said provision or provisions in their relations with the Member State which has made such reservations. |  |
|  |  |
| IN WITNESS WHEREOF, the delegates of the Member States of the International Telecommunication Union named below have, on behalf of their respective competent authorities, signed one copy of the present Final Acts in the Arabic, Chinese, English, French, Russian and Spanish languages. In case of discrepancies or dispute, the French text shall prevail. This copy shall be deposited in the archives of the Union. The Secretary-General shall forward one certified copy to each Member State of the International Telecommunication Union. |  |
| APPENDIX 1 |  |
| **General provisions concerning accounting** |  |
| **1/1 1 Accounting rates** |  |
| **1/2** 1.1 For each applicable service in a given relation, Member States shall endeavour to ensure that authorized operating agencies, by mutual agreement, establish and revise accounting rates to be applied between them, taking into account ITU-T Recommendations and trends in the cost of providing the specific telecommunication service, and divide such rates into terminal shares payable to the authorized operating agencies of terminal countries and, where appropriate, into transit shares payable to the authorized operating agencies of transit countries. | See Article 8 |
| **1/3** 1.2 Alternatively, in traffic relations where ITU-T cost studies can be used as a basis, the accounting rate may be determined in accordance with the following method: |  |
| **1/4** *a)* authorized operating agencies shall establish and revise their terminal and transit shares taking into account ITU-T Recommendations; | D-Series, see Article 8 |
| **1/5** *b)* the accounting rate shall be the sum of the terminal shares and any transit shares. |  |
| **1/6** 1.3 When one or more authorized operating agencies acquire, either by flat-rate remuneration or other arrangements, the right to utilize a part of the circuit and/or installations of another authorized operating agency, the former have the right to establish their share as mentioned in Nos. 1/2 (1.1) and 1/3 (1.2) above, for this part of the relation. |  |
| **1/7** 1.4 In cases where one or more international routes have been established by agreement between authorized operating agencies and where traffic is diverted unilaterally by the authorized operating agency of origin to an international route which has not been agreed with the authorized operating agency of destination, the terminal shares payable to the authorized operating agency of destination shall be the same as would have been due to it had the traffic been routed over the agreed primary route, and the transit costs are borne by the authorized operating agency of origin, unless the authorized operating agency of destination is prepared to agree to a different share. |  |
| **1/8** 1.5 In cases where traffic is routed via a transit point without authorization and/or agreement to the transit share, the transit authorized operating agency has the right to set the level of the transit share to be included in the international accounts. |  |
| **1/9** 1.6 Where an authorized operating agency has a duty or fiscal tax levied on its accounting-rate shares or other remunerations, it shall not in turn impose any such duty or fiscal tax on other authorized operating agencies. |  |
| **1/10 2 Establishment of accounts**  |  |
| **1/11** 2.1 Unless otherwise agreed, the authorized operating agencies responsible for collecting the charges shall establish a monthly account showing all the amounts due, and send it to the authorized operating agencies concerned. |  |
| **1/12** 2.2 The accounts should be sent as promptly as possible, taking into account relevant ITU-T Recommendations, and, except in cases of *force majeure*, before the end of a period of 50 days following the month to which they relate, unless otherwise mutually agreed. | D.195: Time-scale for settlement of accounts for international telecommunication services |
| **1/13** 2.3 In principle, an account shall be considered as accepted without the need for specific notification of acceptance to the authorized operating agency which sent it. |  |
| **1/14** 2.4 However, any authorized operating agency has the right to question the contents of an account within a period of two calendar months after the receipt of the account, but only to the extent necessary to bring any differences within mutually agreed limits. |  |
| **1/15** 2.5 In relations where there are no special agreements, a quarterly settlement statement showing the balances of the monthly accounts for the period to which it relates shall be prepared and issued as soon as possible by the creditor authorized operating agency, and shall be sent to the debtor authorized operating agency, which, after verification, shall return a copy endorsed with its acceptance. |  |
| **1/16** 2.6 In indirect relations where a transit authorized operating agency acts as an accounting intermediary between two terminal points, Member States shall endeavour to ensure that authorized operating agencies include accounting data for transit traffic in the relevant outgoing traffic account to authorized operating agencies beyond it in the routing sequence as soon as possible after receiving the data from the originating authorized operating agency, in accordance with the relevant ITU-T Recommendations. | See Article 8 |
| **1/17 3 Settlement of balances of accounts** |  |
| **1/18 3.1 Choice of the currency of payment** |  |
| **1/19** 3.1.1 The payment of balances of international telecommunication accounts shall be made in the currency selected by the creditor, after consultation with the debtor. In the event of disagreement, the choice of the creditor shall prevail in all cases, subject to the provisions in No. 1/20 (3.1.2) below. If the creditor does not specify a currency, the choice shall rest with the debtor. |  |
| **1/20** 3.1.2 If a creditor selects a currency with a value fixed unilaterally or a currency the equivalent value of which is to be determined by its relationship to a currency with a value also fixed unilaterally, the use of the selected currency must be acceptable to the debtor. |  |
| **1/21** 3.1.3 Provided the periods of payment are observed, authorized operating agencies have a right, by mutual agreement, to settle their balances of various kinds by offsetting: |  |
| **1/22** *a)* credits and debits in their relations with other authorized operating agencies; |  |
| **1/23** *b)* any other mutually agreed settlements, if appropriate. |  |
| **1/24** This rule also applies in case payments are made through specialized payment agencies in accordance with arrangements with authorized operating agencies. |  |
| **1/25 3.2 Determination of the amount of payment** |  |
| **1/26** 3.2.1 The amount of the payment in the selected currency, as determined below, shall be equivalent in value to the balance of the account. |  |
| **1/27** 3.2.2 If the balance of the account is expressed in the monetary unit of the IMF, the amount of the selected currency shall be determined by the relationship in effect on the day before payment, or by the latest relationship published by the IMF, between the monetary unit of the IMF and the selected currency. |  |
| **1/28** 3.2.3 However, if the relationship of the monetary unit of the IMF to the selected currency has not been published, the amount of the balance of account shall, at a first stage, be converted into a currency for which a relationship has been published by the IMF, using the relationship in effect on the day before payment or the latest published relationship. The amount thus obtained shall, at a second stage, be converted into the equivalent value of the selected currency, using the closing rate in effect on the day prior to payment or the most recent rate quoted on the official or generally accepted foreign-exchange market of the main financial centre of the debtor country. |  |
| **1/29** 3.2.4 If, in accordance with a special arrangement, the balance of the account is not expressed in the monetary unit of the IMF, the payment shall also be the subject of this special arrangement and: |  |
| **1/30** *a)* if the selected currency is the same as the currency of the balance of account, the amount of the selected currency shall be the amount of the balance of account; |  |
| **1/31** *b)* if the selected currency for payment is different from the currency in which the balance is expressed, the amount shall be determined by converting the balance of account to its equivalent value in the selected currency in accordance with the provisions of No. 1/28 (3.2.3) above. |  |
| **1/32 3.3 Payment of balances** |  |
| **1/33** 3.3.1 Payment of balances of account shall be effected as promptly as possible, but in no case later than two calendar months after the day on which the settlement statement is dispatched by the creditor authorized operating agency. Beyond this period, the creditor authorized operating agency may, subject to prior notification in the form of a final demand for payment, and unless otherwise agreed, charge interest at a rate of up to 6 per cent per annum, reckoned from the day following the date of expiry of the said period. |  |
| **1/34** 3.3.2 The payment due on a settlement statement shall not be delayed pending settlement of a query on that account. Adjustments which are later agreed shall be included in a subsequent account. |  |
| **1/35** 3.3.3 On the date of payment, the debtor shall transmit the amount of the selected currency as computed above by a bank cheque, transfer or any other means acceptable to the debtor and the creditor. If the creditor expresses no preference, the choice shall fall to the debtor. |  |
| **1/36** 3.3.4 The payment charges imposed in the debtor country (taxes, clearing charges, commissions, etc.) shall be borne by the debtor. Any such charges imposed in the creditor country, including payment charges imposed by intermediate banks in third countries, shall be borne by the creditor. |  |
| **1/37 3.4 Additional provisions** |  |
| **1/38** 3.4.1 If, between the time the remittance (bank transfer, cheques, etc.) is effected and the time the creditor is in receipt of that remittance (account credited, cheque encashed, etc.), a variation occurs in the equivalent value of the selected currency calculated as indicated in No. 1/25 (3.2) above, and if the difference resulting from such variations exceeds 5 per cent of the amount due as calculated following such variations, the total difference shall be shared equally between debtor and creditor. |  |
| **1/39** 3.4.2 Should there be a radical change in the international monetary system which invalidates or makes inappropriate one or more of the foregoing paragraphs, authorized operating agencies are free to adopt, by mutual agreement, a different monetary basis and/or different procedures for the settlement of balances of accounts, pending a revision of the above provisions. |  |
| APPENDIX 2 |  |
| **Additional provisions relating tomaritime telecommunications** |  |
| **2/1 1 General** |  |
| **2/2** 1.1 The provisions contained in Article 8 and Appendix 1, taking into account the relevant ITU-T Recommendations, shall also apply to maritime telecommunications when establishing and settling accounts under this Appendix, insofar as the following provisions do not provide otherwise. | * D.90: Charging, billing, international accounting and settlement in the maritime mobile service
* D.91: Transmission in encoded form of maritime telecommunications accounting information
 |
| **2/3** **2 Accounting authority** |  |
| **2/4** 2.1 Charges for maritime telecommunications in the maritime mobile service and the maritime mobile-satellite service shall, in principle, and subject to national law and practice, be collected from the maritime mobile station licensee: |  |
| **2/5** *a)* by the administration that has issued the licence; or |  |
| **2/6** *b)* by an authorized operating agency; or |  |
| **2/7** *c)* by any other entity or entities designated for this purpose by the administration referred to in No. 2/5 (2.1.*a)*) above. |  |
| **2/8** 2.2 The administration or the authorized operating agency or the designated entity or entities listed in 2.1 above are referred to in this Appendix as the "accounting authority". |  |
| **2/9** 2.3 References to authorized operating agency contained in Article 8 and Appendix 1 shall be read as "accounting authority" when applying the provisions of Article 6 and Appendix 1 to maritime telecommunications. |  |
| **2/10** 2.4 Member States shall designate their accounting authority or authorities for the purposes of implementing this Appendix and notify their names, identification codes and addresses to the Secretary-General for inclusion in the List of Ship Stations and Maritime Mobile Service Identity Assignments. The number of such names and addresses shall be limited, taking into account the relevant ITU-T Recommendations. |  |
| **2/11 3 Establishment of accounts** |  |
| **2/12** 3.1 In principle, an account shall be considered as accepted without the need for specific notification of acceptance to the service provider that sent it. |  |
| **2/13** 3.2 However, any accounting authority has the right to question the contents of an account for a period of six calendar months after dispatch of the account, even after the account has been paid. |  |
| **2/14** **4 Settlement of balances of account** |  |
| **2/15** 4.1 All international maritime telecommunication accounts shall be paid by the accounting authority without delay and in any case within six calendar months after dispatch of the account, except where the settlement of accounts is undertaken in accordance with No. 2/17 (4.3) below. |  |
| **2/16** 4.2 If international maritime telecommunication accounts remain unpaid after six calendar months, the administration that has licensed the mobile station shall, on request, take steps, within the limits of applicable national law, to ensure settlement of the accounts from the licensee. |  |
| **2/17** 4.3 If the period between the date of dispatch and receipt exceeds one month, the receiving accounting authority should at once notify the originating service provider that queries and payments may be delayed. The delay shall, however, not exceed three calendar months in respect of payment, or five calendar months in respect of queries, both periods commencing from the date of receipt of the account. |  |
| **2/18** 4.4 The debtor accounting authority may refuse the settlement and adjustment of accounts presented more than twelve calendar months after the date of the traffic to which the accounts relate, unless provided otherwise under national law in which case the maximum deadline can be within eighteen calendar months. |  |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_