

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

D.50

(04/2011)

SERIES D: GENERAL TARIFF PRINCIPLES

General tariff principles – Principles applicable to GII-
Internet

International Internet connection

Recommendation ITU-T D.50



ITU-T D-SERIES RECOMMENDATIONS

GENERAL TARIFF PRINCIPLES

TERMS AND DEFINITIONS	D.0
GENERAL TARIFF PRINCIPLES	
Private leased telecommunication facilities	D.1–D.9
Tariff principles applying to data communication services over dedicated public data networks	D.10–D.39
Charging and accounting in the international public telegram service	D.40–D.44
Charging and accounting in the international telex service	D.45–D.49
Principles applicable to GII-Internet	D.50–D.59
Charging and accounting in the international telex service	D.60–D.69
Charging and accounting in the international facsimile service	D.70–D.75
Charging and accounting in the international videotex service	D.76–D.79
Charging and accounting in the international phototelegraph service	D.80–D.89
Charging and accounting in the mobile services	D.90–D.99
Charging and accounting in the international telephone service	D.100–D.159
Drawing up and exchange of international telephone and telex accounts	D.160–D.179
International sound- and television-programme transmissions	D.180–D.184
Charging and accounting for international satellite services	D.185–D.189
Transmission of monthly international accounting information	D.190–D.191
Service and privilege telecommunications	D.192–D.195
Settlement of international telecommunication balances of accounts	D.196–D.209
Charging and accounting principles for international telecommunication services provided over the ISDN	D.210–D.269
Charging and accounting principles for next generation networks (NGN)	D.270–D.279
Charging and accounting principles for universal personal telecommunication	D.280–D.284
Charging and accounting principles for intelligent network supported services	D.285–D.299
RECOMMENDATIONS FOR REGIONAL APPLICATION	
Recommendations applicable in Europe and the Mediterranean Basin	D.300–D.399
Recommendations applicable in Latin America	D.400–D.499
Recommendations applicable in Asia and Oceania	D.500–D.599
Recommendations applicable to the African Region	D.600–D.699

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T D.50

International Internet connection

Summary

Recommendation ITU-T D.50 recognizes the sovereign right of each State to regulate its telecommunications. It recommends that Administrations involved in the provision of international Internet connections negotiate and agree to bilateral commercial arrangements enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission amongst others.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T D.50	2000-10-06	3
1.1	ITU-T D.50 (2000) Amend. 1	2004-06-04	3
2.0	ITU-T D.50	2008-10-30	3
3.0	ITU-T D.50	2011-04-01	3

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

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

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

© ITU 2011

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

Table of Contents

	Page
Appendix I – General considerations for charging criteria and options for international Internet connectivity	2
I Introduction	2
I.1 Connection criteria	2
I.2 Charging options	2
I.3 International link capacity	2

Recommendation ITU-T D.50

International Internet connection

The World Telecommunication Standardization Assembly (Rev. Johannesburg, 2008)

recognizing

- a) both the sovereign right of each State to regulate its telecommunications and the object of facilitating economic and social development by means of efficient telecommunication services, as reflected in the Preamble to the Constitution;
- b) paragraph 50 of the Tunis Agenda;
- c) that Plenipotentiary Resolution 22 (Rev. Antalya, 2006) on Apportionment of revenues in providing international telecommunication services, in its *noting a* stipulates that the concept of network externalities may apply to international traffic between developing and developed countries,

noting

- a) the rapid growth of Internet and Internet protocol-based international services;
- b) that international Internet connections remain subject to agreements between the parties concerned, which are operating agencies authorized by Member States; and
- c) that continuing technical and economic developments require ongoing studies in this area,

recommends

1 that administrations take appropriate measures nationally to ensure that parties (including operating agencies authorized by Member States) involved in the provision of international Internet connections negotiate and agree to bilateral commercial arrangements, or other arrangements as agreed between administrations, enabling direct international Internet connections that take into account the possible need for compensation between them for the value of elements such as traffic flow, number of routes, geographical coverage and cost of international transmission, and the possible application of network externalities, amongst others;

2 that the General Considerations in Appendix I should be used to accelerate the objectives of the Tunis Agenda number 50.

Appendix I

General considerations for charging criteria and options for international Internet connectivity

(This appendix does not form an integral part of this Recommendation.)

I Introduction

The following general considerations and criteria for international Internet interconnectivity aim to assist administrations concerned in their bilateral negotiations as referred to in the main body of Recommendation ITU-T D.50.

The material presented here is intended as an illustrative set of considerations that may be taken into account by those administrations who wish to negotiate agreement covering international connectivity between their respective Internet networks.

I.1 Connection criteria

Administrations and operating agencies authorized by Member States may agree to interconnect their networks based on charging criteria including, but not restricted to, the extent of network connectivity and degree of reachability to Internet end users and websites.

The agreed level of traffic exchanged may also be taken into consideration, provided that administrations and operating agencies authorized by Member States may use suitable safeguard agreement to address any concerns that international traffic flows are not fraudulently manipulated.

Service performance is another factor that may be considered. Administrations and operating agencies authorized by Member States may agree to consider network performance, availability of contact points, trouble reporting, among other considerations.

I.2 Charging options

Administrations and operating agencies authorized by Member States may find these charging criteria helpful in establishing the method of charging. Interconnection methods, and therefore charging methods, include peering, transit, hybrid forms of peering or transit, and any arrangement as mutually agreed between them, including indirect interconnection. International peering connections can be arranged on a settlement-free basis as mutually agreed to by the parties.

I.3 International link capacity

Where one or more international links are required, arrangements for the international link capacities required and the apportionment of cost for the international link recognize that administrations and operating agencies authorized by Member States bring value to the connectivity agreement. In determining the apportionment of cost, multiple methods of apportionment are acceptable, as long as mutually agreed to by administrations and agencies authorized by Member States, including making alternative arrangements.

China expressed reservation on this appendix.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Terminals and subjective and objective assessment methods
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	Data networks, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks
Series Z	Languages and general software aspects for telecommunication systems