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SERIES D: TARIFF AND ACCOUNTING PRINCIPLES
AND INTERNATIONAL TELECOMMUNICATION/ICT
ECONOMIC AND POLICY ISSUES

General tariff principles – Principles applicable to GII-
Internet

International aspects of universal service

Recommendation ITU-T D.53

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ECONOMIC AND POLICY ISSUES**

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Recommendation ITU-T D.53

International aspects of universal service

Summary

Recommendation ITU-T D.53, while recognizing the sovereign right of Member States to define and regulate their universal service/access policies, proposes general outlines to guide governments and regulators in their tasks and management functions regarding universal service funds in a globalized digital environment.

History

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Availability, cost, IIC, internet, universal service, universal service funds, USF.

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

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.

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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/>.

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Introduction

Member States have taken historically and even today different approaches to universal service as seen in the "Universal service fund and digital inclusion for all study," published by ITU in 2013. The success of the different Member States in managing their universal service projects has relied mainly, amongst other things, on the ability of regulation and universal service policy to adapt to changing conditions and market technology.

In that sense, those regulatory frameworks that are flexible enough to adapt to rapid technological and market developments have allowed governments and regulators to conduct effective universal service projects, for example, including broadband as not only a target of universal service, but as the main control variable given the undeniable role of broadband as a catalyst for economic growth in nation states.

As broadband is a factor that depends not only on internal conditions of each state, but rather is of a highly international nature, it should be understood that currently, the success of universal service policies that are key to broadband development, are heavily influenced by these external conditions that are uncontrollable for each state.

Recommendation ITU-T D.53

International aspects of universal service¹

1 Scope

This Recommendation proposes general principles to guide Member States, relevant government agencies and regulators in their tasks and management functions regarding universal service funds in the context of global integration, where the objectives of universal service policies depend not only on internal factors, but are also influenced and conditioned by uncontrollable external conditions.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

[ITU-T D.50] Recommendation ITU-T D.50 (2011), *International Internet connection*.

3 Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

IIC	International Internet Connectivity
IRU	Indefeasible Right of Use
IXP	Internet Exchange Point

4 Principles of universal service

4.1 Concept of universal service

It has broadly been recognized that universal service has three main tenets:

Availability: The level of service should be identical for all users anywhere and at any time.

Affordability: The price of the service should not be prohibitively high so as to have a negative impact on access.

Accessibility: Subscribers should be treated equally in terms of service, price, quality of service, wherever and whenever they access the service.

¹ In accordance with clause 9.5.4 of WTSA Resolution 1, it was requested that the following reservations be appended to this Recommendation:

- The following country has expressed a reservation with respect to this Recommendation: Australia
- The following countries have expressed a reservation and will not apply this Recommendation: Canada and United States of America
- This Recommendation is not applicable for Finland, Norway, Switzerland and Sweden
- This Recommendation is not applicable to Germany, Poland, Portugal and the United Kingdom

While universal service is defined as an instrument and key objective to broadband, then, given the international nature of this factor, both the availability and affordability of this service nationwide will be highly correlated to the price of international connectivity to the Internet, whereby Member States must include in the analysis the intrinsic characteristic of the broadband so as to internalize within the universal service projects all the external forces that condition its success nationwide.

4.2 Identification of external forces that determine the success of universal service projects

Member States and regulators should pay special attention to the following points when designing, adapting or revising policies, regulations or projects of universal service/access:

- The level of competition in the market for the provision of international Internet capacity, both locally and regionally.
- The evolution of prices and taxation issues for international transit, of prices of the (IRU) contracts, or other types of contracts for the provision of international Internet capacity.
- The ability to establish and facilitate peering contracts between national operators, regional operators and operators worldwide of international Internet capacity.

4.3 How universal service projects can help address capacity constraints associated with international Internet connectivity

Administrations and regulators of Member States should reduce the impact of economic and contractual conditions of the international Internet connectivity (IIC) on the level of achievement of the policies and projects of universal service by using universal service funds to promote and support the following initiatives:

- Creation and/or strengthening of national or regional Internet exchange points (IXPs).
- Creation and/or strengthening of data centres, both national and regional.

5 Universal service in a global context

Where legislation permits, in order to reduce the nationwide effects of IIC costs in a region or group of Member States, administrations and regulators of these Member States may initiate and carry out bilateral or multilateral agreements to invest the funds of universal service in projects of common infrastructure, as a basis for international Internet connectivity.

6 Guidelines for increasing the effectiveness of, and compliance with, universal service policies

It is recommended that Member States consider the following measures:

- Encourage national and international providers to finance universal service, under conditions of transparency, and non-discrimination.
- Promote, where possible, public private partnerships for the development of universal services projects.
- Reduce the costs of IIC.
- Where possible, work towards the reduction of custom duties for telecommunications equipment.
- Encourage investment in services in rural areas, notably to public health and educational institutions, even when return on investment is not immediately visible.
- Increase availability of new technologies, with a particular view for the development of broadband networks and technologies and next-generation cellular mobile networks.

- Ensure conditions that sustain investments, despite the speed with which modern telecommunications networks and systems are becoming obsolete.
- Comply with international regulations such as [ITU-T D.50], which promote the application of payment mechanisms between countries that take account of the costs borne by developing countries for Internet access.

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