ITU

INTERNATIONAL TELECOMMUNICATION UNION



**D.211** (12/98)

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

# SERIES D: GENERAL TARIFF PRINCIPLES

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

International accounting for the use of the signal transfer point and/or signalling point for relay in Signalling System No. 7

ITU-T Recommendation D.211

(Previously CCITT Recommendation)

#### 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 telemessage service	D.45–D.49
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.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 ITU-T List of Recommendations.

#### **ITU-T RECOMMENDATION D.211**

## INTERNATIONAL ACCOUNTING FOR THE USE OF THE SIGNAL TRANSFER POINT AND/OR SIGNALLING POINT FOR RELAY IN SIGNALLING SYSTEM No. 7

#### Source

ITU-T Recommendation D.211 was revised by ITU-T Study Group 3 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 15th of December 1998.

i

#### FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The 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 Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 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 term *recognized operating agency (ROA)* includes any individual, company, corporation or governmental organization that operates a public correspondence service. The terms *Administration, ROA* and *public correspondence* are defined in the *Constitution of the ITU (Geneva, 1992)*.

#### INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The 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, the ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

#### © ITU 1999

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

# CONTENTS

# Page

1	No accounting	1
2	Flat rate remuneration	1
3	Traffic volume remuneration	2
4	Unit for traffic volume accounting	2

#### **Recommendation D.211**

## INTERNATIONAL ACCOUNTING FOR THE USE OF THE SIGNAL TRANSFER POINT AND/OR SIGNALLING POINT FOR RELAY IN SIGNALLING SYSTEM No. 7

(Melboune, 1988; revised in 1998)

#### The ITU-T,

#### considering

a) that in Signalling System No. 7, the signalling need not follow the same path as the traffic, but may be routed via an STP/SPR provided by a third Administration;

b) that in SS No. 7 user-to-user information and Administration data is be passed over the signalling system in addition to call control data;

c) that use of STPs/SPR will increase network reliability and resilience, and enable the advantages offered by common channel signalling to be fully realized. Accounting should therefore be on as simple and reasonable basis as possible, so as not to discourage STP/SPR working;

d) that the capability exists for non-circuit-related information transfer which could have considerable impact on the signalling network in general, and the STP/SPR in particular, and therefore may justify a more precise method of accounting;

e) that it will be necessary to measure the levels and types of traffic routed via an STP/SPR not only for international accounting purposes, but also for route dimensioning and STP/SPR capacity purposes.

#### recommends the following accounting options

there are several options for international accounting for the use of STPs/SPR in SS No.7, as indicated below.

#### 1 No accounting

**1.1** Where signalling traffic volumes are low, and/or to minimize costs, STP/SPR providers may decide that no accounting will be necessary in a signalling relation.

**1.2** Where facilities are made available by STP/SPR providers on a reciprocal basis (including temporary routing via STP/SPR facilities, for example in the case of network failures), STP/SPR providers may bilaterally agree to waive international accounting.

#### 2 Flat rate remuneration

With this approach, STP/SPR providers are remunerated for the facilities provided on a flat-rate basis. The level of remuneration will be determined by the STP/SPR provider on the basis of an apportionment of the associated costs.

## **3** Traffic volume remuneration

**3.1** With this approach, STP/SPR providers are remunerated based on the volume of signalling traffic handled for others by their STPs/SPR. The levels of remuneration will be determined by the STP/SPR provider on the basis of an apportionment of the associated costs. [A recommended charging unit(s) is for further study (see Note).]

**3.2** Additional options under the traffic volume remuneration may be, for example:

- a lower charge may be applied to signalling traffic handled during off-peak signalling traffic periods, with a higher charge applicable to signalling traffic handled during peak signalling traffic periods; and/or
- an STP/SPR provider may decide to handle signalling traffic up to an agreed volume at a specified charge rate, with a different charge rate applicable to signalling traffic above the agreed volume.

NOTE – Signalling messages may vary in size up to a maximum of 272 octets. Accounting based on octets may be an alternative therefore to per message accounting, but due to the volume of signalling traffic, these may have to be measured in thousands or millions of octets. For further study.

## 4 Unit for traffic volume accounting

**4.1** Signalling messages may vary between 6 octets and 272 octets. Recommendation Q.752 provides for recording both octets and messages for accounting purposes. Counter values may be in the order of several millions per day.

**4.2** STP/SPR providers may decide to establish their remuneration requirement either:

a) per message; or

b) based on a multiple of octets, e.g. kilo octet.

**4.3** When per message accounting is selected, the average number of octets per message, which can be derived from the traffic monitors, may be used as a basis for establishing the per message level of remuneration required.

# **ITU-T RECOMMENDATIONS SERIES**

- Series A Organization of the work of the ITU-T
- Series B Means of expression: definitions, symbols, classification
- Series C General telecommunication statistics

#### 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 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 TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
- Series N Maintenance: international sound programme and television transmission circuits
- Series O Specifications of measuring equipment
- Series P Telephone transmission quality, telephone installations, local line networks
- 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 and open system communications
- Series Y Global information infrastructure and Internet protocol aspects
- Series Z Languages and general software aspects for telecommunication systems