



INTERNATIONAL TELECOMMUNICATION UNION

**CCITT**

**D.220**

THE INTERNATIONAL  
TELEGRAPH AND TELEPHONE  
CONSULTATIVE COMMITTEE

**GENERAL TARIFF PRINCIPLES**

**CHARGING AND ACCOUNTING IN INTERNATIONAL  
TELECOMMUNICATIONS SERVICES**

---

**CHARGING AND ACCOUNTING PRINCIPLES  
TO BE APPLIED TO INTERNATIONAL  
CIRCUIT-MODE DEMAND BEARER SERVICES  
PROVIDED OVER THE INTEGRATED  
SERVICES DIGITAL NETWORK (ISDN)**

**Recommendation D.220**

---



Geneva, 1991

## FOREWORD

The CCITT (the International Telegraph and Telephone Consultative Committee) is a permanent organ of the International Telecommunication Union (ITU). CCITT 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 Plenary Assembly of CCITT which meets every four years, establishes the topics for study and approves Recommendations prepared by its Study Groups. The approval of Recommendations by the members of CCITT between Plenary Assemblies is covered by the procedure laid down in CCITT Resolution No. 2 (Melbourne, 1988).

Recommendation D.220 was prepared by Study Group III and was approved under the Resolution No. 2 procedure on the 22 of March 1991.

---

### CCITT NOTE

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

© ITU 1991

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.

## **Recommendation D.220**

### **CHARGING AND ACCOUNTING PRINCIPLES TO BE APPLIED TO INTERNATIONAL CIRCUIT-MODE DEMAND BEARER SERVICES PROVIDED OVER THE INTEGRATED SERVICES DIGITAL NETWORK (ISDN)**

(Melbourne, 1988, revised 1990)

#### **Preamble**

This Recommendation sets out the general principles for charging and accounting to be applied by Administrations for the provision of international circuit-mode demand bearer services provided over the ISDN. These services are defined in the relevant CCITT Recommendations.

#### **1 General principles**

In principle, there should be no charging and accounting discrimination between bearer services which require the same network resources and/or functions to provide the customer with the service requested.

When the network resources required to provide bearer services are different, the collection charges and accounting rates may depend on the costs of those resources.

The services covered by this Recommendation are listed in Annex A and are subject to the same general principles. Unique aspects of the services are also noted in Annex A.

#### **2 Collection charges**

2.1 Collection charges should be set in accordance with the bearer service requested by the customer. In the event that Administrations elect to provide a higher capacity connection to meet that request, the customer shall be charged on the basis of the connection type corresponding to the requested service.

2.2 The network resources necessary to support the requested services may be different, for example:

2.2.1 the basic utilization charges for a service requiring 64 kbit/s unrestricted may in principle be at a rate higher than those for a service requiring 3.1 kHz audio;

2.2.2 the basic utilization charges for a service requiring 3.1 kHz audio may in principle be higher than those for a service requiring speech only<sup>1)</sup>.

2.3 Measurement of a call for charging purposes should in principle be based on duration and should commence when the information channel is open for communication<sup>1)</sup>.

#### **3 Accounting**

3.1 Administrations should, by agreement, establish the accounting rate(s) applicable in a given relation.

The accounting rate should be divided into terminal shares payable to the Administrations of the terminal countries and, where applicable, into transit shares payable to the transit Administration. These shares should be established in accordance with the relevant provisions of the Administrative Regulations [1] and the CCITT Recommendations.

3.2 Accounting rates should, in principle, relate to the network resources and functions required to provide the service requested. In exceptional cases when the requested facilities are not available, and a higher grade facility is utilized by Administrations, accounting should be based on the facility used.

---

<sup>1)</sup> This is for further study.

3.3 Measurement of traffic for accounting purposes should in principle be based on duration and take into account other relevant CCITT Recommendations. However, Administrations may agree to consider specific accounting to recover the costs associated with short duration calls<sup>1)</sup>.

ANNEX A  
(to Recommendation D.220)

**Categories of circuit-mode bearer services**

- a) Speech: no unique aspects foreseen;
- b) 3.1 kHz: no unique aspects foreseen;
- c) 64 kbit/s unrestricted: no unique aspects foreseen;
- d) 7 kHz: for further study;
- e) Alternate speech/64 kbit/s unrestricted: for further study;
- f) 384 kbit/s unrestricted: the call set up charges for this service may be more significant than for the other services (for further study).

**Reference**

- [1] *Final Acts of the World Administrative Telegraph and Telephone Conference, International Telecommunication Regulations*, ITU, Melbourne, 1988.

---

<sup>1)</sup> This is for further study.