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SERIES D: GENERAL TARIFF PRINCIPLES –
CHARGING AND ACCOUNTING IN INTERNATIONAL
TELECOMMUNICATIONS SERVICES

TARIFF PRINCIPLES APPLYING TO DATA
COMMUNICATION SERVICES OVER DEDICATED
PUBLIC DATA NETWORKS

**GENERAL TARIFF PRINCIPLES FOR
INTERNATIONAL PUBLIC DATA
COMMUNICATION SERVICES**

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NOTES

- 1 CCITT Recommendation D.10 was published in Fascicle II.1 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).
- 2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation D.10

GENERAL TARIFF PRINCIPLES FOR INTERNATIONAL PUBLIC DATA COMMUNICATION SERVICES

Preamble

This Recommendation sets out the general principles and conditions applicable by Administrations to data communication services over international public networks dedicated to this type of communication. It is recognized that this is a rapidly developing field at the present time in terms of the diversity of application and flexibility is therefore essential.

The tariff principles contained in this Recommendation do not apply to leased circuits for private use (see Recommendation D.1).

1 General

1.1 A public data communication service is a data communication service established and operated by an Administration by means of a public data network dedicated to this type of communication.

2 Charging

2.1 *General principles*

2.1.1 Tariffs developed for public data communication service should:

- take into account the provisions of Recommendation D.5;
- take into account tariff relationships with other services provided by the Administrations;
- be flexible enough to enable new needs to be accommodated as the service develops;
- be as administratively simple as possible;
- take into account the geographical configuration of countries;
- not impart undue advantage or disadvantage to any category of user;
- encourage customer choice depending upon his needs as to the use of circuit or packet-switched services where the alternative exists;
- be such as to encourage the use of public data network, meet the needs of as many users as possible, and promote optimum growth and utilization of the network;
- be easily understood by subscribers;
- sustain the service on a long-term basis.

2.1.2 For public data communication services, each Administration should, subject to the applicable national law, establish the charge to be collected from its customers; in so doing, Administrations should make every effort to avoid too great a dissymmetry between the charges applicable in each direction of the same relation.

2.2 *Tariff components*

2.2.1 The tariff should normally consist of two components: the network access component and the network utilization component.

2.2.2 The network access component, normally intended to cover the cost of making the service available, represents the cost of the service which is not dependent on network utilization.

2.2.3 The network utilization component normally covers the costs which are dependent on network utilization.

2.2.4 Some factors which may be taken into account in developing tariffs include, for example:

- user class of service (see Recommendation X.1 [1]);
- optional user facilities (see Recommendation X.2 [2]);
- type of switching;
- volume of data and/or duration of call;

- distance;
- time (peak and off-peak periods);
- route;
- other functions.

While certain of the above factors may be more closely associated with one component or another, some may be associated with both. The particular application of some factors will depend on the type of switching employed.

3 Accounting

3.1 Administrations should, by agreement, establish the overall accounting rate applicable in a given relation and divide that rate into terminal shares payable to the Administrations of the terminal countries and, where appropriate, into transit shares payable to the transit Administration(s). The same accounting rate should apply in both directions of a given relation. The overall accounting rate between two terminal countries should be the same irrespective of the route used.

3.2 Normally only the network utilization component should be considered for international accounts.

3.3 The gathering of information required for charging and accounting should normally be the responsibility of the calling Administration. Additionally, if the interconnection of dissimilar networks occurs at the called Administration, then the latter should be responsible for providing the calling Administration with the necessary data for charging and accounting.

4 Interworking of public data communication services

4.1 Normally, the interconnection of dissimilar data networks (such as packet-to-circuit) should take place at the originating or terminating country Administration. However, conversion at a transit point may be provided if the originating, terminating and transit country Administrations agree.

4.2 In the cases where interworking is permitted, it is recommended that preference be given to the interworking alternatives which provide for the use of data circuits between international data communication centres (gateways).

4.3 Interconnection of a public data network with a public telephone/telex network in a transit country should be avoided.

4.4 Tariff principles in the case of interworking between dissimilar data networks shall be as follows:

4.4.1 Collection charges

4.4.1.1 The charge shall be, according to the policy of the origin Administration, either:

- a) the international charge applicable to the originating network, or
- b) the charge for the international network used.

4.4.1.2 Where appropriate, charges may also be levied for additional facilities used in the country of origin, e.g. for the access network to, and/or the use of, a network interworking facility.

4.4.2 Accounting

International accounting should be based on the accounting rate for the international network used, irrespective of the collection charges applied.

Note – The desirability and possibility of adjusting the accounting rates to include the cost of providing interworking facilities used for international data traffic needs further study in consultation with Study Group I and other relevant Study Groups.

References

- [1] CCITT Recommendation *International user classes of service in public data networks and integrated services digital networks (ISDNs)*, Rec. X.1.
- [2] CCITT Recommendation *International data transmission services and optional user facilities in public data networks*, Rec. X.2.

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