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SERIES D: GENERAL TARIFF PRINCIPLES – CHARGING AND ACCOUNTING IN INTERNATIONAL TELECOMMUNICATIONS SERVICES RECOMMENDATIONS APPLYING IN EUROPE AND THE MEDITERRANEAN BASIN

### DETERMINATION OF ACCOUNTING RATE SHARES AND COLLECTION CHARGES IN TELEPHONE RELATIONS BETWEEN COUNTRIES IN EUROPE AND THE MEDITERRANEAN BASIN

Reedition of CCITT Recommendation D.300 R published in the Blue Book, Fascicle II.1 (1988)

#### NOTES

1 CCITT Recommendation D.300 R 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.

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#### DETERMINATION OF ACCOUNTING RATE SHARES AND COLLECTION CHARGES IN TELEPHONE RELATIONS BETWEEN COUNTRIES IN EUROPE AND THE MEDITERRANEAN BASIN<sup>1)</sup>

#### Introduction

When, in full exercise of their sovereignty, the Administrations of the countries of Europe and the Mediterranean Basin negotiate among themselves agreements for determining the accounting rate shares and when they fix the collection charges to be applied in their telephone relations, it is recommended that they take into consideration:

- for the determination of accounting rate shares and accounting rates, the provisions of § 2 (Determination of accounting rates) of this Recommendation;
- for fixing the collection charges, the provisions contained in § 3 of this Recommendation;
- for fixing tariffs for frontier relations, the provisions contained in § 4 of this Recommendation.

In accordance with Article 30 of the *International Telecommunication Convention*, Nairobi, 1982, the standard rates given in this Recommendation are expressed in the monetary unit of the International Monetary Fund (IMF), the Special Drawing Right (SDR), and in gold francs (G. Fr.).

#### 1 Explanation of some of the terms used in this Recommendation

An explanation of some of the terms used in this Recommendation is given in Recommendation D.000.

# 2 Determination of accounting rate in telephone relations between countries in Europe and the Mediterranean Basin

#### 2.1 *General*

2.1.1 Since the setting up of any international call involves both the international network and the national networks of the terminal countries, the accounting rate share due to each country is derived from three basic elements, to which separate standard rates are applied:

- the *line* (transmission) part of the international network, which includes the various transmission systems used and is a function of the distance;
- the international exchange, i.e. the *switching* part of the international circuit, plus the terminal transmission equipment;
- the national extension, which denotes that part of the national network of each terminal country involved in completing the connection.
- 2.1.2 In special cases where the *line* (transmission) part of an international connection is:
  - a tropospheric scatter link, or
  - a radio link,

the provisions of this Recommendation with regard to the determination of an accounting rate share in relation to the length of the international circuit are not applicable and accounting rate shares should be agreed upon between the Administrations concerned.

Cases in which the *line* (transmission) part of a connection is a satellite link are dealt with in Annex D to this Recommendation.

2.1.3 When a reduced rate is introduced in a given relation, the accounting rates remain fixed in accordance with the provisions below, except in the case of special agreement. Each Administration of origin will determine the collection charges for its outgoing traffic.

<sup>&</sup>lt;sup>1)</sup> Countries in the Mediterranean Basin are countries not belonging to Europe but bordering the Mediterranean Sea.

#### 2.2 Charging zones

For calculating accounting rate shares, each country may be divided into charging zones. If need be, different charging zones may be fixed in a given country for traffic exchanged with different countries.

It is desirable that the number of charging zones for international traffic, in any one country, should be reduced to a minimum. As a general rule, in services between non-adjacent countries, each country should constitute one single zone.

#### 2.3 *Calculation of distances (line part)*

#### 2.3.1 Distances to be taken into consideration

#### 2.3.1.1 General case

2.3.1.1.1 In determining the share payable to a country for the use of international circuits, the distance to be taken into consideration is:

#### in a terminal country

- the *crowflight distance* between:
  - a) the point at which the international circuit crosses the frontier, and
  - b) the international exchange at which the circuit terminates;

#### in a transit country

*the crowflight distance* between the two frontier points at which the international circuit enters and leaves the country in question.

2.3.1.1.2 The same provisions apply to the determination of crowflight distances for groups, supergroups, mastergroups and supermastergroups.

The above provisions for the calculation of distances apply to international circuits both on land cables and on radio-relay links.

#### 2.3.1.2 Special cases

#### 2.3.1.2.1 *Radio-relay links crossing the sea or a third country*

When a frontier is crossed by a radio-relay section of an international circuit passing over a third country or over the sea, without an intermediate relay station, the frontier point for measuring the circuit length shall be the point midway between the two relay stations on either side of the frontier.

#### 2.3.1.2.2 Submarine cables

With regard to international circuits which are routed in submarine cables, the distance to be used for accounting will be calculated as follows:

- a) for the land section of the circuit to the submarine cable station, the distance shall be calculated in accordance with the general principles (i.e. the crowflight distance), it being assumed that the point at which the circuit crosses the frontier is the cable station;
- b) for the submarine cable section, the distance used shall be the actual route distance between the submarine cable stations as determined and agreed by the joint owners of the cable; the distance will be divided appropriately (normally 50/50) between the countries at the extremities of the cable.

#### 2.3.1.2.3 *Special itineraries*

In exceptional circumstances, multiplication factors may be applied to the crowflight distance, from which the terminal and transit shares are calculated, to take account of special itineraries. For example, in the case of a direct transit country, the crowflight distance between the points on the frontier at which the circuit enters and leaves the country may (in exceptional circumstances) be replaced by a length representing the sum of two crowflight segments making up a broken line, etc.

#### 2.3.2 *Possibility of weighting distances*

For calculation of the crowflight distances for the international section a weighting according to the number of circuits is normally applied in a given relation to simplify accounting:

- when there are several international arteries with different itineraries terminating at an international exchange;
- when there are several international exchanges in a country for the relation concerned.

This weighting serves to determine a length (crowflight distance) for fixing the accounting rate share relating to the international section and it would remain in force as long as the structure of the network was not significantly changed. This length of the international section would then be used to fix the *international section* element for the charges for international telephone and telegraph circuits, groups, supergroups, mastergroups and supermastergroups.

#### 2.3.3 *Rounding off distances*

2.3.3.1 Distances less than 50 km shall be rounded up to 50 km.

Example: distance of 24 km rounded up to 50 km.

2.3.3.2 Other distances shall be rounded to the nearest multiple of 50 km.

Examples:

- distance of 72 km rounded to 50 km;
- distance of 126 km rounded to 150 km;
- distance of 175 km rounded to 200 km.

2.3.3.3 This rounding rule applies to the distances in each of the terminal countries and in each of the transit countries and is applied to the total distance calculated for any one country. It is applicable to the remuneration of Administrations both on the basis of a flat-rate price for the facilities made available and on the basis of traffic units.

2.3.3.4 When distances are weighted in accordance with the provisions of § 2.3.2 above, the rounding shall be applied only after the weighted distance has been calculated.

#### 2.3.4 *Existence of several routes in a given relation*

When in a given relation there are several routes traversing different countries, these transit countries shall in all cases receive the share or flat-rate price normally due to them for the distance between the points of entry and exit; any cost of equalizing collection charges in a relation comprising different routes shall be borne solely by the Administration of the country of origin and no deduction shall be made from the remuneration due to the transit countries.

#### 2.4 Standard rates to be applied for international accounting<sup>2</sup>)

For international accounting purposes, there are two methods of remuneration for the facilities made available by Administrations:

- on the basis of traffic units;
- on the basis of a flat-rate price for the facilities made available.

<sup>&</sup>lt;sup>2)</sup> Use of charged time for international accounting instead of conversation time

According to their equipment, some Administrations may have to use charged time data for international accounts instead of conversation time, the charged time being given, for example, by the operator's ticket. In such a case, the Administration of origin will consult the Administration of destination and, when necessary, the Administration of transit countries, to see whether it is necessary to adjust the number of minutes entered in the international accounts to make allowance for the small difference which may exist between the charged time they use and the conversation time they should use for accounting according to Recommendation D.150 and the present Recommendation.

#### 2.4.1 *Remuneration on the basis of traffic units*

To determine the accounting rate shares due to each country, the following standard rates, *per minute of conversation time*, are recommended:

- 1) International network
  - a) Manual operation

	SDR	G.Fr	
- per 100 km of international circuit (excluding any national circuit required for connecting the international exchange to the national exchange serving the subscriber) <sup>a)</sup>	0.013	0.04	
<ul> <li>for the manual international exchange in the country of origin or destination<sup>b)</sup></li> </ul>	0.653	2.00	
- for a manual international exchange in a transit country <sup>b)</sup>	0.653	2.00	
<ul> <li>for the manual international exchange in the country of origin or destination<sup>b)</sup></li> </ul>	0.653	2.00	

#### b) Semi-automatic and automatic operation

	SDR	G.Fr
- per 100 km of international circuit (excluding any national circuit required for connecting the international exchange to the national exchange serving the subscriber) <sup>a)</sup>	0.006	0.02
<ul> <li>for the semi-automatic international exchange in the country of origin<sup>b)</sup></li> </ul>	0.588	1.80
<ul> <li>for the automatic international exchange in the country of origin <sup>b)</sup></li> </ul>	0.059	0.18
<ul> <li>for the automatic and semi-automatic international exchange in the country of destination (including code 11 and 12 operator service)<sup>b)</sup></li> </ul>	0.036	0.11
<ul> <li>for an automatic international transit exchange (in a transit country)<sup>b)</sup></li> </ul>	0.052	0.16

<sup>a)</sup> The standard rates adopted for the *line* element per 100 km of circuit and per minute may not be appropriate to some small capacity submarine cables. In these cases the rates should be fixed by agreement among the parties concerned.

<sup>b)</sup> This share includes the cost of the transmission equipments for one extremity in terminal operation and for two extremities in transit operation.

#### 2) National extension

An amount may be added to cover the costs of the extension of calls over the national network.

Taking into account:

- the (weighted average) number of national exchanges by which an outgoing or incoming international call is routed,

- the (weighted average) number of terminal transmission equipments (component A)<sup>3</sup>) by which an outgoing or incoming international call is routed,
- the (weighted average) crowflight length of the national circuit used for setting up an outgoing or incoming international call,
- the cost per minute of use of a national exchange in an international call,
- the cost per minute of use of a terminal transmission equipment (component A)<sup>3)</sup> in an international call;
- the cost per minute of use of 100 km (crowflight) of national circuit in an international call,
- the administrative cost per minute of an outgoing or incoming international call.

Administrations are recommended, when determining the remuneration of their national extension per minute of international call, not to exceed the maximum values indicated below:

- a) for outgoing traffic: 0.131 SDR or 0.40 G. Fr.;
- b) for incoming traffic: 0.114 SDR or 0.35 G. Fr.

#### 2.4.2 Remuneration on the basis of a flat-rate price for the facilities made available

#### 2.4.2.1 *Remuneration of a direct transit country*

2.4.2.1.1 To determine the flat-rate price for remuneration for the transmission facilities made available by Administrations, the following standard rates are recommended.

	Per year and of transmiss ( <i>line</i>	ion channel
	SDR	G.Fr
- for a telephone circuit <sup>a), b)</sup>	392	1 200
- for a group <sup>a), b)</sup>	3 920	12 000
- for a supergroup <sup>a), b)</sup>	16 335	50 000
- for a mastergroup <sup>b)</sup>	65 338	200 000
- for a supermastergroup <sup>b)</sup>	179 680	550 000

<sup>a)</sup> To allow for the small capacity of some submarine cables, a correction factor may be applied to these rates.

<sup>b)</sup> Including the use of modulation and demodulation equipments or throughband filters in the direct transit country, when the transit transmission facilities are given by complete unit.

2.4.2.1.2 When a circuit leased to a private user passes through a direct transit country, the Administration of this country will be remunerated by the Administrations of the terminal countries with a flat-rate price on the same basis as if the circuit were an ordinary public service circuit applying the rates in § 2.4.2.1.1 above.

The same rule applies to the lease to a private user of groups, supergroups, etc.

<sup>3)</sup> The cost of international telecommunication circuits should be expressed in the form  $A + B \times \frac{1}{100}$ . A represents all costs

relating to terminal transmission equipment for one end of the international circuit, B represents the costs per 100 km (crowflight distance) of the circuit.

#### 2.4.2.2 Remuneration of a country of destination

To determine the flat-rate price for remuneration of countries of destination for facilities made available by Administrations, the following standard rates are recommended:

	Per year and	Per year and per 100 km		
	SDR	G.Fr		
- for a telephone circuit <sup>a)</sup>	392	1 200		
for a group <sup>a)</sup>	3 920	12 000		
- for a supergroup <sup>a)</sup>	16 335	50 000		
for a mastergroup	65 338	200 000		
- for a supermastergroup	179 680	550 000		

1) For the transmission channel (line part)

<sup>a)</sup> To allow for the small capacity of some submarine cables a correction factor may be applied to the above rates.

#### 2) For the international exchange (including the terminal transmission equipment)

- per year and per international circuit connected:

Manual operation	Automatic operation
$\begin{array}{rcrcrcr} 0.653 & {}^{a)} \times & 30 & 000 & {}^{b)} \\ = & 19 & 590 & \text{SDR} \end{array}  & \text{or}  \begin{array}{r} 2.00 & {}^{a)} \times & 30 & 000 & {}^{b)} \\ = & 60 & 000 & \text{G.Fr} \end{array}$	$\begin{array}{ccc} 0.036^{\text{ a})} \times 65\ 000^{\text{ c})} & \text{or} & 0.11^{\text{ a})} \times 65\ 000^{\text{ c})} \\ = 2340 \text{ SDR} & = 7150 \text{ G.Fr} \end{array}$

#### 3) For the national extension

– per year and per international circuit connected:

Manual operation	Automatic operation
PN <sup>d)</sup> × 30 000 <sup>b)</sup>	PN $^{d}$ × 65 000 $^{c}$

- <sup>a)</sup> The cost of the transmission equipment for one extremity is included in the amounts of 0.653 SDR and 0.036 SDR or 2.00 and 0.11 G.Fr.
- <sup>b)</sup> Average number of minutes of traffic routed per year and per manual international telephone circuit.
- <sup>c)</sup> Average number of minutes of traffic routed per year and per semi-automatic or automatic international telephone circuit.
- <sup>d)</sup> PN represents the amount, per minute of conversation time, of the share to be fixed by each Administration for the extension of the connection on national territory.

- 4) The remuneration for terminal transmission equipment has been included in the above rates [2) of § 2.4.2.2] based on annual costs per extremity of:
  - 9800 SDR or 30 000 G. Fr. for a supermastergroup;
  - 5227 SDR or 16 000 G. Fr. for a mastergroup;
  - 2189 SDR or 6 700 G. Fr. for a supergroup;
  - 1045 SDR or 3 200 G. Fr. for a group;
  - 425 SDR or 1 300 G. Fr. for a circuit.

#### 2.4.3 All the amounts given in § 2 above are reproduced in the three tables in Annexes A, B and C.

#### 2.5 *Remuneration for facilities made available for the extension of intercontinental circuits*

In principle the rates mentioned in § 2 above apply also to the remuneration of facilities made available for the extension of intercontinental cable or satellite circuits.

#### 2.6 *Extension of submarine cables*

For the extension of submarine cables through their national territory, Administrations may offer to countries using such submarine cables alternative charging conditions in the form of special transit charges called "rights of way" (ROW). One specific "ROW" charging method is described in Annex E to this Recommendation, but it is recognized that other "ROW" charging methods, the composition and method of application of which shall be determined by bilateral agreement, could be offered by direct transit countries.

# 3 Determination of collection charges in telephone relations between countries in Europe and the Mediterranean Basin

#### 3.1 General

The establishment of the collection charge is a national matter. Whilst, in general, Administrations correlate collection charges and accounting rates, the two will not necessarily be the same for a number of reasons, for example:

- a) in most countries, collection charges and accounting rates will be expressed in different currencies;
- b) collection charges and accounting rates may be based on different traffic units;
- c) the value of national currencies may fluctuate in relation to the SDR or the gold franc;
- d) collection charges may be influenced by government fiscal policies;
- e) Administrations frequently establish common collection charges for geographical zones or groups of countries;
- f) in many relations there will be different routes with different accounting rates to which a single collection charge will be applied.

#### 3.2 *Charging zones*

For fixing collection charges each country may be divided into charging zones. If need be, different charging zones may be fixed in a given country for traffic exchanged with different countries.

It is desirable that the number of charging zones for international traffic, in any one country, should be reduced to a minimum. As a general rule, in services between non-adjacent countries, each country should constitute one single zone.

The fixing of zones for collection charges does not imply the same for zones for accounting rate shares which can be weighted appropriately to make allowances for a zonal structure. Similarly, the fixing of zones for accounting rate shares (§ 2.2) does not imply any requirement for fixing zones for collection charges.

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#### 3.3 Determination of collection charges

3.3.1 The collection charge, in principle, should be the equivalent in national currency of the accounting rate. If, taking into account the factors in §§ 3.1 and 3.2 above, an Administration wishes to fix a collection charge at a higher or lower amount than the direct equivalent of the accounting rate, this Administration may apply a multiplication factor K. This factor K should not be more than 1.8 when applied to the total accounting rate in the relation concerned.

As a general principle, Administrations should make every effort to avoid too large a dissymmetry between the collection charges applicable in each direction of the same relation and should endeavour to agree upon application of the same factor K. Collection charges should be fixed at reasonable levels and the factor K = 1.8 is a maximum which should not be automatically applied. The factor K may be different for the different relations operated by an Administration.

Note - It is emphasized that the application of a factor K should not affect international accounting.

3.3.2 In considering the collection charges for a relation in which automatic and semi-automatic working both exist, each Administration should decide to fix its charges:

- either by establishing different charges for each method of operation;
- or by establishing a single collection charge weighted according to the volume of each type of traffic.

3.3.3 To recover the costs of operator assistance, Administrations may levy additional charges per call, the level of which is a national matter.

#### 4 Frontier relations between countries in Europe and the Mediterranean Basin

The conditions governing the establishment and operation of frontier relations depend largely on the structure of the national networks in the frontier areas. These conditions tend to alter, particularly as a result of network automation, which leads in turn to automation of frontier relations. Consequently, the collection charges applied to these relations are tending to become increasingly subject to the limitations imposed by the automatic charging equipments used. The collection charges and accounting rates to be applied to frontier relations should therefore be fixed by agreement between the Administrations concerned.

Whenever the situation permits, there should be no exchange of international accounts for frontier calls, the entire charge being retained by the Administration which collects it. The latter should, however, supply all frontier traffic information required to the Administration of the country of destination.

#### ANNEX A

#### (to Recommendation D.300 R)

#### Standard rates to be applied in Europe and the Mediterranean Basin in determining accounting rate shares in the telephone service (traffic unit basis)

A - Accounting rate shares applicable in terminal countries per minute of conversation time

	Manual operation					Semi-automatic operation				Automatic operation			
Direction of operation	Transmission (per 100 km of circuit) <sup>a)</sup> Internationa exchange <sup>b)</sup>			Transmission (per 100 km of circuit) <sup>a)</sup>		International exchange <sup>b)</sup>		Transmission (per 100 km of circuit) <sup>a)</sup>		International exchange <sup>b)</sup>			
	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	
Outgoing Incoming	0.013 0.013	0.04 0.04	0.653 0.653	2.00 2.00	0.006	0.02 0.02	0.588 0.036	1.80 0.11	0.006 0.006	0.02 0.02	0.059 0.036	0.18 0.11	

B – Accounting rate shares applicable in transit countries per minute of conversation time

	Direct	transit		Switched transit									
Mai	Manual Transmission (per 100 km of circuit) <sup>a)</sup>		nual Automatic		matic	Manual				Automatic			
(per 10			nission 0 km of uit) <sup>a)</sup>	Transn (per 100 circu	) km of	Intern: excha		(per 10)	nission ) km of 1it) <sup>a)</sup>	International exchange <sup>b)</sup>			
SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr		
0.013	0.04	0.006	0.02	0.013	0.04	0.653	2.00	0.006	0.02	0.052	0.16		

<sup>a)</sup> The standard rates adopted for the *line* element per 100 km of circuit and per minute may not be appropriate to some small capacity submarine cables. In these cases the rates should be fixed by agreement among the parties concerned.

<sup>b)</sup> Including the cost of the transmission equipments for one extremity in terminal operation and for two extremities in transit operation.

#### ANNEX B

#### (to Recommendation D.300 R)

#### Standard rates to be applied in Europe and the Mediterranean Basin in remuneration for transmission facilities made available by Administrations in a direct transit country (flat-rate price basis)

Transmission (line part) Rates per 100 km per annum				
392	1 200			
3 920	12 000			
16 335	50 000			
65 338	200 000			
179 680	550 000			
	(line Rates per 100 SDR 392 3 920 16 335 65 338			

- a) The correspondence between the various unit elements considered is as follows, with reference to a 4 kHz bandwidth per telephone circuit:
  - a group consists of 12 telephone circuits,
  - a supergroup consists of 5 groups, i.e. 60 telephone circuits,
  - a mastergroup consists of 5 supergroups, i.e. 300 telephone circuits,
  - a supermastergroup consists of 3 mastergroups, i.e. 900 telephone circuits.
- <sup>b)</sup> To allow for the small capacity of some submarine cables a correction factor may be applied to the above rates.
- <sup>c)</sup> Including the use of modulation an demodulation equipments or throughbands filters in the direct transit country, when the transit transmission facilities are given by complete unit.

#### ANNEX C

#### (to Recommendation D.300 R)

#### Standard rates to be applied in Europe and the Mediterranean Basin in remuneration for facilities made available between Administrations in a destination country (flat-rate price basis)

		nission part)	Internation	al exchange	National	extension	
Unit element considered	Per 100 km and per year		Oper	ration	Operation		
considered			Manual	Automatic	Manual	Automatic	
	SDR	G.Fr	per year	per year	per year	per year	
Circuit <sup>a)</sup>	392	1 200	$\begin{array}{c} 0.653 \ ^{b)} \times \ 30 \ 000 \ ^{c)} \\ = \ 19 \ 590 \ \text{SDR} \\ & \text{or} \\ 2.00 \ ^{b)} \times \ 30 \ 000 \ ^{c)} \\ = \ 60 \ 000 \ \text{G.Fr}^{a)} \end{array}$	$\begin{array}{l} 0.036^{\text{ b})} \times 65\ 000^{\text{ d})} \\ =\ 2340\ \text{SDR} \\ \text{or} \\ 0.11^{\text{ b})} \times 65\ 000^{\text{ d})} \\ =\ 7150\ \text{G.Fr}^{\text{ a})} \end{array}$	PN <sup>e)</sup> × 30 000 <sup>e)</sup>	PN <sup>e)</sup> × 65 000 <sup>d)</sup>	
Group <sup>a)</sup>	3 920	12 000	1				
Supergroup <sup>a)</sup>	16 335	50 000	ont applicable	not applicable	not applicable	not applicable	
Mastergroup	65 338	200 000					
Supermastergroup	179 680	550 000					

<sup>a)</sup> To allow for the small capacity of some submarine cables a correction factor may be applied to the above rates.

- <sup>b)</sup> The cost of the transmission equipment for one extremity is included in the figures of 0.653 and 0.036 SDR or 2.00 and 0.11 G.Fr and was based on annual costs of 425 SDR or 1300 G.Fr for a circuit, which amount includes an allowance for the terminal equipment of a group (1045 SDR or 3200 G.Fr) and supergroup (2189 SDR or 6700 G.Fr).
- <sup>c)</sup> Average number of minutes of traffic routed per year and per manual international telephone circuit.
- <sup>d)</sup> Average number of minutes of traffic routed per year and per semiautomatic or automatic international telephone circuit.
- <sup>e)</sup> PN represents the amount, per minute of conversation time, of the share to be fixed by each Administration for the extension of the connection on national territory beyond the international exchange.

#### ANNEX D

#### (to Recommendation D.300 R)

#### Remuneration for the facilities used to set up telephone-type satellite circuits (Intelsat system) via an earth station in Europe and the Mediterranean Basin

#### D.1 Flat-rate charges for the provision of telephone-type circuits set up via a foreign European earth station

#### Preliminary note

The charges are the same, whether the telephone-type circuit is used in an intra-European or an intercontinental relation.

When an Administration operates a direct satellite telephone-type circuit set up via a foreign European earth station, the following standard rates are recommended for the remuneration of the facilities provided by the country operating the earth station:

D.1.1 for the remuneration of the international circuit section between the border of the outgoing terminal country and the international exchange of the country operating the earth station<sup>4</sup>):

- in accordance with the standard rates set out in § 2.4.2.2, 1) of this Recommendation, 392 SDR or 1200 G.
   Fr. per 100 km of transmission channel (*line* part) per annum;
- where appropriate, the amount laid down in § 2.4.2.2, 4) of this Recommendation, to pay for the terminal equipment (component A)<sup>5)</sup> in the international exchange.

D.1.2 for the remuneration of the earth station and the national extension from the international exchange mentioned in § D.1.1, above, to that station:

– 9800 SDR or 30 000 G. Fr. per telephone-type circuit and per annum.

D.1.3 for the remuneration of the space segment, the amount fixed by Intelsat and usually payable directly to that organization.

D.2 Traffic unit price applicable in telephone relations between countries of Europe and the Mediterranean Basin, for traffic routed via satellite links

#### Preliminary note

The same standard rates are used to determine the accounting rate shares payable to terminal and transit (switched transit) countries.

#### D.2.1 *Routing via satellite links only*<sup>6)</sup>

When, in a given relation, all traffic is routed using international satellite links, the terrestrial distance between the respective international terminal or transit exchanges is disregarded. The costs to be taken into account for determining the terminal or transit shares relating to the use of the link are:

- the cost of the earth station and the national terrestrial extension to the international exchange in the same country (including a component A)<sup>5)</sup> in the exchange);
- the cost of the space segment.

The accounting rate shares applicable per minute are as follows:

- for the earth station and the national terrestrial extension to the international exchange in the same country (including a component A)<sup>5)</sup> in the exchange): 0.15 SDR or 0.46 G. Fr.
- for the space segment: 0.06 SDR or 0.18 G.Fr.

<sup>5)</sup> The cost of international telecommunication circuits should be expressed in the form  $A + B \times \frac{1}{100}$ . A represents all costs

relating to terminal transmission equipment *for one end of the international circuit*, *B* represents the costs per 100 km (crowflight distance) of the circuit.

<sup>&</sup>lt;sup>4)</sup> Part of the circuits provided at the expense of the Administration operating the earth station.

<sup>&</sup>lt;sup>6)</sup> The figures in § D.2.1 were calculated using 65 000 minutes per circuit.

#### D.2.2 Routing via satellite and terrestrial links

When, in a given relation, international traffic is routed via both satellite and terrestrial links, account should be taken of the provisions of § 2.3 of Recommendation D.300 R concerning the calculation of terrestrial circuit distances, as well as of the cost elements involved in satellite routing specified in § D.2.1 above. When these two components have been calculated separately, a weighting factor based on the number of circuits set up on each transmission medium is applied to determine the transmission (*line* part) element of the accounting rate.

*Note* – To take account of the relatively low utilization factor of certain earth stations, a correction factor may be applied to the standard rates given in the present Annex D by the Administrations owning the stations concerned.

#### ANNEX E

#### (to Recommendation D.300 R)

## Special charging conditions for the extension of submarine cables (§ 2.6 of this Recommendation)

#### Example of an agreement on the purchase of rights of way

A bilateral agreement between Administrations for the purchase of rights of way may, for example, be included on the following basis:

a) Contract aspects

Under such an agreement, the Administrations or operating agencies concerned would be granted rights of way across a national territory on the basis of a contract concluded for a fixed period, such as for fifteen years, and renewable on expiry. In the event of withdrawal of the cable from service, an option for repurchase of the rights of way could be included.

The rights of way could be granted in accordance with needs expressed, and the timetable for granting them need not be linked to that for the purchase of circuits in the submarine cable.

*Note* – The contract would not cover dedicated facilities; the Administration or agency granting rights of way could, if necessary, use all the facilities of its network to provide for the extension of submarine cable circuits on its territory.

b) *Financial aspects* 

Purchase of rights of way through a national network would be calculated, for each terminal Administration, in relation to half the crowflight distance between the submarine cable landing point and the border crossing point of the transit Administration.

Payment for rights of way by each terminal country could consist of:

- a flat-rate price for the initial assignment per circuit and per kilometre, determined on the basis of the average cost per kilometre of the telecommunication arteries of the national network concerned;
- an annual maintenance and operation charge fixed on a flat-rate basis at a percentage of the initial assignment rate corresponding to the level of maintenance and operation costs incurred by the Administration concerned.

Tariff rebates could be granted for groups of circuits purchased at the same time, under the conditions set out in § 2.4.2.1 of this Recommendation.

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