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THE INTERNATIONAL TELEGRAPH AND TELEPHONE CONSULTATIVE COMMITTEE



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 TELEX RELATIONS BETWEEN COUNTRIES IN EUROPE AND THE MEDITERRANEAN BASIN

Reedition of CCITT Recommendation D.301 R published in the Blue Book, Fascicle II.1 (1988)

# NOTES

1 CCITT Recommendation D.301 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 TELEX 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 telex relations, it is recommended that they take into consideration:

- for the determination of accounting rate shares and accounting rates, the provisions of § 2 of this Recommendation;
- for fixing the collection charges, the provisions contained in § 3 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) which is 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 rates in telex 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 for 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.

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

# 2.2 Calculation of distances (line part)

#### 2.2.1 Distances to be taken into consideration

#### 2.2.1.1 General case

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

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.

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

# 2.2.1.2 Special cases

# 2.2.1.2.1 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.

# 2.2.1.2.2 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 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.

#### 2.2.1.2.3 Special itineraries

In exceptional circumstances, multiplication factors may be applied to the crowflight distance, from which the terminal and transit charges 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.

#### 2.2.2 *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 shares relating to the international section and it would remain in force as long as the structure of the network was not significantly changed. The length of the international section would then be used to fix the *international section* element for the shares for international telex circuits.

# 2.2.3 Rounding off distances

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

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

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

Examples:

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

2.2.3.3 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.

2.2.3.4 When distances are weighted in accordance with the provisions of § 2.2.2, the rounding shall be applied only after the weighted distance has been calculated.

#### 2.2.4 Existence of several routes in a given relation

When in a given relation there are several routes traversing different transit 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.

# 2.3 Standard rates to be applied for international accounting

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.

# 2.3.1 *Remuneration on the basis of traffic units*

To determine the accounting rate shares for each country, the following standard rates, *per minute of telex call*, 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> , <sup>b)</sup>		
- for the manual international exchange in the country of origin or destination <sup>b), c)</sup>	0.817	2.50
- for a manual international exchange in a transit country <sup>b), c)</sup>	0.817	2.50

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

	SDR	G.Fr
<ul> <li>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>,<sup>b)</sup></li> </ul>		
<ul> <li>for the semi-automatic international exchange in the country of origin:<sup>b)</sup></li> </ul>	0.784	2.40
- for the automatic international exchange in the country of origin <sup>b), c)</sup>	0.029	0.09
<ul> <li>for the automatic international exchange in the country of destination <sup>b), c)</sup></li> </ul>	0.029	0.09
<ul> <li>for an automatic international exchange in a transit country <sup>b), c)</sup></li> </ul>	0.039	0.12

- <sup>a)</sup> The rate for the *line* element was calculated at 0.0008 and 0.0003 SDR or at 0.0026 and 0.00115 G.Fr per 100 km and per minute for manual and automatic operation respectively. Because of these relatively low amounts, the cost of the *line* element was included in the rate shares for the international exchange, taking into account an average distance of 500 km for incoming and outgoing terminal traffic and of 1000 km for transit traffic. As a consequence, direct transit traffic can only be charged for on the basis of the flat-rate procedure.
- <sup>b)</sup> The standard rates mentioned for the *line* element per 100 km of circuit and per minute as set out in footnote <sup>a)</sup> above 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>c)</sup> This amount includes the cost of the transmission equipment for one extremity in terminal operation and for two extremities in transit operation.

#### 2) National extension

An amount may be added to cover the cost 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>2)</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>2)</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.

<sup>&</sup>lt;sup>2)</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.

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: 0.088 SDR or 0.27 G. Fr.;
- b) for incoming traffic: 0.082 SDR or 0.25 G. Fr.

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

# 2.3.2.1 Remuneration of a direct transit country

2.3.2.1.1 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 per 100 km of transmission channel ( <i>line</i> part)	
		SDR	G.Fr
- per telegraph channel (VFT or TDM)	50 bauds <sup>a)</sup> , <sup>b)</sup> 100 bauds <sup>a)</sup> , <sup>b)</sup> 200 bauds <sup>a)</sup> , <sup>b)</sup> 300 bauds	14.7 29.4 58.8 68.6	45 90 180 210
- per telegraph carrier circuit <sup>a), b)</sup>		392	1200

<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> Where, in order to establish a circuit, two telegraph channel in a direct transit country are connected, an additional charge shall be made for the lease of the transmission equipment for two telegraph channel extremities, irrespective of the number of such connections in the direct transit country, as follows:

 $216 \times 2 = 432$  SDR or  $660 \times 2 = 1320$  G.Fr for a 50-baud circuit,

 $294 \times 2 = 588$  SDR or  $900 \times 2 = 1800$  G.Fr for a 100-baud circuit,

 $441 \times 2 = 882$  SDR or  $1350 \times 2 = 2700$  G.Fr for a 200-baud circuit,

 $719 \times 2 = 1438$  SDR or  $2200 \times 2 = 4400$  G.Fr for a 300-baud circuit.

2.3.2.1.2 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 rate in § 2.3.2.1.1.

# 2.3.2.2 Remuneration of a country of destination

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

# 1) For the transmission channel (line part)

	Per year and	per 100 km
	SDR	G.Fr
50 bauds	(see <sup>a)</sup>	below)
100 bauds <sup>b)</sup>	29.4	90
200 bauds <sup>b)</sup>	58.8	180
300 bauds b)	68.6	210
	392	1200
	100 bauds <sup>b)</sup> 200 bauds <sup>b)</sup>	50 bauds         (see <sup>a)</sup> 100 bauds <sup>b)</sup> 29.4           200 bauds <sup>b)</sup> 58.8           300 bauds <sup>b)</sup> 68.6

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

per year and per 50-baud international circuit connected:

Manual operation	Automatic operation
$\begin{array}{cccc} 0.817 & ^{\rm c)} \times & 18 & 000 & ^{\rm d)} & \text{or} & 2.50 & ^{\rm c)} \times & 18 & 000 & ^{\rm d)} \\ = & 14 & 706 & \text{SDR} & = & 45 & 000 & \text{G.Fr} \end{array}$	$\begin{array}{ccccccc} 0.029 & ^{c)} \times & 40 & 000 & ^{e)} & \text{or} & 0.09 & ^{c)} \times & 40 & 000 & ^{e)} \\ = & 1160 & \text{SDR} & = & 3600 & \text{G.Fr} \end{array}$

- 3) For the national extension
  - per year and per 50-baud international circuit connected:

Manual operation	Automatic operation
PN <sup>()</sup> $\times$ 18 000 <sup>d</sup> )	PN <sup>f)</sup> $\times$ 40 000 <sup>e)</sup>

- <sup>a)</sup> Included in the international exchange price [see note <sup>a)</sup> of § 2.3.1].
- <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> The cost of the terminal telex transmission equipment for one extremity is included in the amounts of 0.817 and 0.029 SDR or 2.50 and 0.09 G.Fr.
- <sup>d)</sup> Average number of minutes of traffic routed per year and per manual international telex circuit.
- e) Average number of minutes of traffic routed per year and per semi-automatic or automatic international telex circuit.
- <sup>f)</sup> PN represents the amount, per minute of telex call, of the share to be fixed by each Administration for the extension of calls on national territory.
- 4) The rentals for telegraph channel transmission terminal equipment, per year, per terminal, determined in relation to costs are as follows:
  - 216 SDR or 660 G. Fr. per 50-baud telegraph channel,
  - 294 SDR or 900 G. Fr. per 100-baud telegraph channel,
  - 441 SDR or 1350 G. Fr. per 200-baud telegraph channel,
  - 719 SDR or 2200 G. Fr. per 300-baud telegraph channel.

The remuneration of the international exchange given in point 2) of § 2.3.2.2 takes into account an amount of 216 SDR or 660 G. Fr. relating to 50-baud terminal equipment.

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

### 2.4 *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.

# **3** Determination of collection charges in telex 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 Determination of collection charges

3.2.1 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 above, an Administration wishes to fix a collection charge at a higher or lower amount than the direct equivalent of the accounting rate, it may apply a multiplication factor K. This factor K should not be more than 1.8 when applied to the 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.

3.2.2 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.

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

# ANNEX A

### (to Recommendation D.301 R)

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

A – Accounting rate shares applicable in terminal countries per minute of telex call

	Manual operation		Semi-automatic operation			Automatic operation						
Direction of operation	(per 100	nission 0 km of 1it) <sup>a)</sup>	Interna excha		Transn (per 100 circu	) km of		ational inge <sup>c)</sup>	(per 10	nission ) km of 1it) <sup>a)</sup>	Interna excha	
	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr
Outgoing Incoming	••••• <sup>b)</sup>	<sup>b)</sup> <sup>b)</sup>	0.817 <sup>b)</sup> 0.817 <sup>b)</sup>	2.50 <sup>b)</sup> 2.50 <sup>b)</sup>	<sup>b)</sup>	<sup>b)</sup>	0.784 <sup>b)</sup> 0.029 <sup>b)</sup>	2.40 <sup>b)</sup> 0.09 <sup>b)</sup>	<sup>b)</sup>	<sup>b)</sup>	0.029 <sup>b)</sup> 0.029 <sup>b)</sup>	0.09 <sup>b)</sup> 0.09 <sup>b)</sup>

B - Accounting rate shares applicable in transit countries per minute of telex call

	Switched transit							
Manual					Auto	matic		
Transn (per 100 km		International exchange <sup>c)</sup>		Transmission (per 100 km of circuit) <sup>a)</sup>		International exchange		
SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	SDR	G.Fr	
<sup>b)</sup>	<sup>b)</sup>	0.817 <sup>b)</sup>	2.50 <sup>b)</sup>	<sup>b)</sup>	<sup>b)</sup>	0.039 <sup>b)</sup>	0.12 <sup>b)</sup>	

- <sup>a)</sup> The standard rates mentioned for the *line* element per 100 km of circuit and per minute as set out in footnote <sup>b)</sup> below may not be appropriate to small capacity submarine cables. In these cases, the rates should be fixed by agreement among the parties concerned.
- <sup>b)</sup> The rate for the *line* element was calculated at 0.0008 and 0.0003 SDR or 0.0026 and 0.00115 G.Fr per 100 km and per minute for manual and automatic operation respectively. Because of these relatively low amounts, the cost of the *line* element was included in the rate shares for the exchange, taking into account an average distance of 500 km for incoming and outgoing terminal traffic and of 1000 km for transit traffic. As a consequence, direct transit traffic can no longer be accounted for on the basis of the traffic-unit price procedure, taking into account the rates indicated in this Recommendation.
- <sup>c)</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.301 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 ( <i>line</i> part)		
Unit element considered		Rates per 100 km per annum		
		SDR	G.Fr	
Telegraph carrier circu	it <sup>a), b)</sup>	392	1200	
Telegraph channel	50 bauds <sup>a), c)</sup> 100 bauds <sup>a), c)</sup> 200 bauds <sup>a), c)</sup> 300 bauds <sup>a), c)</sup>	14.7 29.4 58.8 68.6	45 90 180 210	

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

- <sup>b)</sup> Including, wherever applicable, use of modulation and demodulation equipment or throughband filters in the direct transit country.
- <sup>c)</sup> Where, in order to establish a circuit, telegraph channels in a direct transit country are connected, an additional charge is made for the lease of transmission equipement for two telegraph channel extremities, irrespective of the number of such connections in the direct transit country, as follows:
  - $216 \times 2 = 432$  SDR or  $660 \times 2 = 1320$  G.Fr for a 50-baud circuit,
  - $294 \times 2 = 588$  SDR or  $900 \times 2 = 1800$  G.Fr for a 100-baud circuit,
  - $441 \times 2 = 882$  SDR or  $1350 \times 2 = 2700$  G.Fr for a 200-baud circuit,
  - $719 \times 2 = 1438$  SDR or  $2200 \times 2 = 4400$  G.Fr for a 300-baud circuit.

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# ANNEX C

# (to Recommendation D.301 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)

	Transmission ( <i>line</i> part)		International exchange		National extension		
Unit element Per 100 km			Oper	ation	Operation		
considered	and per year		Manual	Automatic	Manual	Automatic	
	SDR	G.Fr	per year	per year	per year	per year	
Per international telegraph circuit:							
– 50 bauds	a)	a)	$\begin{array}{c} 0.817 \ ^{\text{b})} \times 18 \ 000 \ ^{\text{c})} \\ = \ 14 \ 706 \ \text{SDR} \\ & \text{or} \\ 2.50 \ ^{\text{b})} \times 18 \ 000 \ ^{\text{c})} \\ = \ 45 \ 000 \ \text{G.Fr}^{\text{b})} \end{array}$	$\begin{array}{l} 0.029^{\text{ b)}} \times 40\ 000^{\text{ d)}} \\ = \ 1160\ \text{SDR} \\ & \text{or} \\ 0.09^{\text{ b)}} \times 40\ 000^{\text{ d)}} \\ = \ 3600\ \text{G.Fr}^{\text{ b)}} \end{array}$	PN <sup>e)</sup> × 18 000 <sup>c)</sup>	PN <sup>e)</sup> × 40 000 <sup>d)</sup>	
<ul> <li>100 bauds</li> <li>200 bauds</li> <li>300 bauds</li> <li>Per telegraph carrier</li> </ul>	29.4 58.8 68.6	90 180 210	not applicable	hot applicable	not applicable	not applicable	
circuit	392	1200		]			

<sup>a)</sup> Included in the international exchange prices [see footnote b) of Annex A].

<sup>b)</sup> The cost of telex terminal transmission equipement for one extremity is included in the amounts of 0.817 and 0.029 SDR or 2.50 and 0.09 G.Fr.

<sup>c)</sup> Average number of minutes of traffic routed per year and per manual international telex circuit.

<sup>d)</sup> Average number of minutes of traffic routed per year and per semi-automatic or automatic international telex circuit.

<sup>e)</sup> PN represents the amount, per minute of telex call, of the share to be fixed by each Administration for the extension of the connection on national territory.

# ANNEX D

#### (to Recommendation D.301 R)

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

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

#### Preliminary note

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

When an Administration operates a direct satellite (VFT/TDM) telegraph-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>3</sup>), the rates set out in § 2.3.2.1.1 of the present Recommendation apply.

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:

		SDR	G.Fr
<ul> <li>per telegraph channel (VFT or TDM) per annum</li> </ul>	50 bauds 100 bauds 200 bauds 300 bauds	350 700 1400 1640	1 071 2 142 4 285 5 020
- per telegraph carrier circuit per annum		9800	30 000

D.1.3 for the remuneration of the space segment:

<ul> <li>per telegraph channel (VFT or TDM) per annum</li> </ul>	50 bauds 100 bauds 200 bauds 300 bauds	1/26 1/13 1/6 1/5	of the Intelsat charge for a telegraph carrier circuit
----------------------------------------------------------------------	-------------------------------------------------	----------------------------	--------------------------------------------------------

<sup>&</sup>lt;sup>3)</sup> Part of the circuits provided at the expense of the Administration operating the earth station.

The remuneration of the space segment for a full telegraph carrier circuit is normally payable directly to Intelsat;

D.1.4 for the remuneration of the two terminal equipments (components A)<sup>4</sup>) interconnecting the land line extensions mentioned in §§ D.1.1 and D.1.2 above, the amounts set out in § 2.3.2.1.1, b) of the present Recommendation.

# D.2 Traffic unit price applicable in telex 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

When, in a given relation, all traffic is routed using international satellite links, the terrestrial distance between the respective terminal or transit exchanges is disregarded. In addition to the amounts quoted in § 2.3.1 of the present Recommendation, it is recommended that the following remuneration for the satellite link be applied in order to determine the terminal or transit shares relating to the use of that link:

# - 0.012 SDR or 0.036 G. Fr.<sup>5</sup>)

# D.2.2 Routing via satellite and terrestrial links

When, in a given relation, international traffic is routed via both satellite and terrestrial links, the additional remuneration is calculated by applying a weighting factor based on the number of circuits set up on each transmission medium to the transmission (*line* part) element.

*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.

<sup>&</sup>lt;sup>4)</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>5)</sup> These figures were calculated using 26 telex circuits per carrier circuit and 40 000 minutes per year.

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- 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