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SECTION 4

CHARGING AND ACCOUNTING IN THE INTERNATIONAL TELEMESSAGE SERVICE

Recommendation D.45

CHARGING AND ACCOUNTING PRINCIPLES

FOR THE INTERNATIONAL TELEMESSAGE SERVICE

(Melbourne, 1988)

Preamble

This Recommendation sets out the general principles for charging and international accounting to be applied by Administrations for the provision of the international telemessage service. (See also Recommendation F.50.)

1 General principles

In determining tariff principles to be applied to this service, consideration should be given to the provisions of Recommendation D.5 and the fact that collection charges are a national matter.

2 Collection charges

2.1 The collection charges established by Administrations shall be based on either:

a) per message, or

b) per block of 50 words

according to the policy of the origin Administration.

2.2 Special facilities such as greeting cards and express delivery (§ 9 of Recommendation F.50) are for further study.

3 International 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. The same accounting rate should apply in both directions of a given relation.

3.2 In principle, the accounting rate between Administrations should be on a per message basis (message as defined in Recommendation F.50).

3.3 Where the international transmission is achieved over the international public network, Administrations may, by bilateral agreement, account only for delivery costs, on a per message basis, the use of the international public network being accounted for in the normal manner for the international public network used.

3.4 *Special facilities*

Accounting for special facilities such as greeting cards and express delivery cards is for further study.

4 Refunds

4.1 Refund of collection charges for international telemessages may be permitted at the discretion of the originating Administration if it can be established that the message was undelivered through no fault of the sender and/or the sender's agent.

4.2 All claims for refunds of charges must be presented within three months of the date of input of the telemessage. Normally such claims will require appropriate documentation of the sender's or addressee's claim.

5 Service messages

Subject to formal agreement of the Administration, service messages relating to the international telemessage service shall be free of charge and shall not involve international accounting.

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SECTION 5

CHARGING AND ACCOUNTING

IN THE INTERNATIONAL TELETEX SERVICE

Recommendation D.50

TARIFF AND INTERNATIONAL ACCOUNTING PRINCIPLES FOR THE INTERNATIONAL TELETEX SERVICE

(Malaga-Torremolinos, 1984; amended at Melbourne, 1988)

Preamble

This Recommendation sets out the general principles for charging and international accounting to be applied by Administrations for the provision of international Teletex service

Taking into account the fact that Teletex service may be provided on different national and international public networks by Administrations, this Recommendation recognizes the need for some flexibility in application of tariffs by the Administrations concerned and the usefulness of having information on the various costs involved, in addition to the costs of the ordinary data transmission over the international network.

The CCITT,

considering

(a) that Teletex service can be provided over different types of public network, for example over packet-switched public data networks (PSPDNs) or circuit-switched public data networks (CSPDNs) over the public switched telephone network (PSTN) or over the integrated services digital network (ISDN);

(b) that international Teletex connection should be over public data networks (PSPDNs or CSPDNs) or over the ISDN if possible;

(c) that, consequently, different types of collection charges and international accounting rates can be applied for Teletex service; and

(d) that collection charges are a national matter,

unanimously recommends

See also Recommendation F.200 [1].

1 Collection charges

1.1 *General principles*

For the public Teletex service, each Administration should, subject to the applicable national law, establish the charges to be collected from its customers, this being considered a national matter; 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, whenever the costs to be covered in the concerned countries are approximately of the same amount.

1.2 *Tariff components*

The tariff applicable to the Teletex service may consist of several components.

1.2.1 *Network access component*

In principle, Administrations should apply:

— the charges which are usually collected for accessing the network to which the user's terminal is connected, or

— an access charge which is applied exclusively to the Teletex service.

These access charges are not dependent on network uitilization; generally they consist of:

a) an initial fee (non-recurring);

b) a subscription rental.

The network access charges shall not be included in international accounting.

1.2.2 *Service access component*

To remunerate the equipment and facilities specifically implemented to provide the Teletex service, Administrations may, if they so wish, collect a service access charge in addition to the network access charge.

Generally, this charge consists of a subscription fee payable at certain intervals.

The service access charges shall not be included in international accounting.

1.2.3 *Network utilization component*

Taking into account the different network interconnections the following charges should be applied.

1.2.3.1 *Teletex to Teletex communications*

1.2.3.1.1 *Teletex traffic where no interworking between different networks is involved*

In principle, Administrations should apply the international charges which are applicable to the network used.

Nevertheless, Administrations which are able to discriminate the various types of traffic may, if they so wish, collect a different charge reflecting the additional costs of providing the Teletex service.

1.2.3.1.2 *Teletex traffic involving interworking between different networks*

The tariff to be levied shall cover the following components:

— use of the international network;

— if needed, use of the interworking facilities and of the national access network in the country of origin;

— if needed, use of the interworking facilities and the national network in the country of destination.

The structure and the level of this tariff are a national matter.

1.2.3.2 *Teletex to telex communications*

In principle, when the international telex network is used, Administrations should apply the normal international telex charge.

If an international Teletex link is used, the charge may be either:

a) the normal international telex charge, or

b) the charge applicable to the Teletex traffic in the concerned relation.

In the last case, however, Administrations may collect an extra charge for the use of the Teletex/telex conversion facility, including the delivery over the national telex network in the country of destination.

2 International accounting

2.1 *General principles*

The level and division of the accounting rate should be based on those normally applied to the international network used, in accordance with the appropriate Recommendations.

Note — The accounting principles for Teletex traffic between ISDNs or between ISDNs and existing networks (PSPDN, CSDN or PSTN) are for further study.

2.2 *Teletex traffic where no interworking between different networks is involved*

Where traffic can be discriminated, and where additional costs of the Teletex service are identified, Administrations may bilaterally agree to apply a different accounting rate reflecting those additional costs (for further study).
2.2.1 For Teletex traffic over PSPDNs, the accounting provisions of Recommendations D.11, D.12 and D.13 should apply in principle

2.2.2 For Teletex traffic over CSPDNs, the accounting provisions of Recommendation D.20 should apply in principle Recommendation contains no provision concerning the division of accounting rates in transit relations. Therefore, Administrations may agree to establish a fixed transit share (for further study).

2.3 *Teletex traffic involving interworking between different public networks: PSPDN, CSPDN, PSTN*

2.3.1 *International network*

International accounting should be based on the specific international network used, i.e. in principle the PSPDN (see Recommendation X.300).

2.3.2 *Use of interworking facilities located in the country of origin*

No compensation should be included in the international accounts to cover the costs of interworking facilities in the country of origin.

2.3.3 *Use of interworking facilities located in the country of destination*

The destination Administration should be entitled to remuneration which covers the costs of using the interworking facility and any extra costs which may be incurred delivering a message over a national network different in type to the international network used. Consequently, the accounting share due to the destination Administration may consist of two components:

— the share applicable to the international network used;

— a specific share to cover the costs described above.

Pending the cost studies, the last component will be bilaterally agreed between the Administrations concerned.

2.3.4 *Use of interworking facilities located in a transit country*

2.3.4.1 The transit country should be entitled to remuneration which covers the cost of using the interworking facility. Remuneration to the transit Administration should be made by a supplement to the transit share. The level of this supplement will be subject to bilateral agreement between the Administration concerned.

2.3.4.2 The remuneration of the destination Administration for delivering a message over a national network different in type to the international network used is for further study.

2.3.4.3 The determination and the division of the accounting rate in such transit relations is for further study.

2.4 *Interworking between Teletex and telex*

2.4.1 If the international telex network is used, the normal telex accounting rate and divisions shall apply.

2.4.2 If an international X.71 or X.75 link is used (conversion Teletex to telex is made in the country of destination), the international accounting should in principle be the same as for Teletex traffic of that relation; however, in addition to its Teletex share, the destination Administration should receive a specific share to cover the extra cost of the conversion facility, including the delivery over the national telex network. The level of this specific share will be subject to bilateral agreement between the Administrations concerned.

Reference

[1] CCITT Recommendation *Teletex service* , Vol. II, Rec. F.200.

The principles to apply in the case of international interconnection of Teletex/telex conversion facilities are for further study.

SECTION 6

CHARGING AND ACCOUNTING IN THE INTERNATIONAL TELEX SERVICE

Recommendation D.60

GUIDING PRINCIPLES TO GOVERN THE APPORTIONMENT OF ACCOUNTING RATES IN INTERCONTINENTAL TELEX RELATIONS

(Geneva, 1980)

The CCITT,

considering

(a) that the accounting rates applicable to telex traffic in various regions are already established in certain CCITT Recommendations;

(b) that neither Recommendation D.67 nor any other Recommendation contains provisions determining the sharing of accounting rates to be applied to intercontinental telex traffic;

(c) that it would be desirable to establish certain guiding principles to govern the apportionment of accounting rates in intercontinental telex relations;

(d) that, for reasons of equity, it would be desirable for the accounting rate to be shared by the participating Administrations (terminal or possibly transit) in proportions which take account of the service provided by each of these Administrations;

recommends

General principles

In an intercontinental telex relation, the bilateral or multilateral agreement between the Administrations concerned should normally establish the same accounting rate for both directions of the relation regardless of the route utilized.

1 Direct relations

1.1 A direct relation is one between two terminal Administrations where traffic is routed over direct circuits, that is over circuits provided for the exclusive use of the terminal Administrations.

1.2 For the routing of traffic over direct circuits, the accounting rate is in principle divided between the Administrations of the terminal countries on a 50/50 basis for both directions of traffic. Proportions other than 50/50 may be used when the intercontinental facilities made available by each of the Administrations of the terminal countries are not approximately equivalent.

1.3 In cases where a direct relation exists and traffic is diverted by the Administration of origin to the financial detriment of the country of destination:

— unilaterally, via an unauthorized transit route, or

— unnecessarily (i.e. for other than genuine overflow traffic reasons or to meet routing difficulties), via an authorized overflow transit route,

it is for the Administration of origin to reach agreement with the transit Administration and to remunerate it from the amount of the country of origin's terminal share.

The above does not apply when the Administration of destination does not implement the number of channels required by the Administration of origin in order to provide for a grade of service in which the loss probability in the busy hour will not be more than 1 call in 50.

1.4 If a relation is the subject of a bilateral agreement for the routing of traffic flow on a direct circuit and consistently gives rise to traffic flow difficulties or genuine overflow traffic necessitating recourse to a transit routing in one or both directions, the sharing of the overall accounting rate may be the subject of agreement, for the traffic routed in transit as provided in § 2.2 below.

2 Transit relations

2.1 A transit relation is a relation between two terminal Administrations where traffic is routed by switching in an international transit exchange(s) located in a country or countries other than the country of origin or the country of destination.

2.2 In a transit relation, the accounting rate should normally be divided into two terminal shares and one or more transit shares depending upon the circumstances.

In negotiations concerning the division of the accounting rate it is recommended that the balance of the accounting rate, after deduction of the transit shares, be divided equitably between the terminal Administrations concerned.

For example, a division of 50/50 may be used when the facilities provided by the terminal Administrations are approximately equivalent. Proportions other than 50/50 may be used when the facilities made available by each of the Administrations of the terminal countries are not approximately equivalent, or where a 50/50 division would not otherwise be equitable.

Recommendation D.61

CHARGING AND ACCOUNTING PROVISIONS RELATING TO THE MEASUREMENT OF THE CHARGEABLE DURATION OF A TELEX CALL

(Melbourne, 1988)

1 General considerations

Canada and the United States of America have expressed reservations regarding the application of the provisions of § 2.
See also Recommendation F.61.

The chargeable duration that is used in the establishment of international accounts is not necessarily the same as that used in the subscribers' accounts. The duration taken into consideration in the international accounts can be fixed precisely and independently of the characteristics of the network.

2 Fully automatic service

2.1 *Chargeable duration of a call*

For the fully automatic international telex service, the *chargeable duration* of a call should be calculated between a conventional start fixed at between 5 and 7 s after the *start* of the call-connected signal and an instant fixed not later than 1 s after the start of the clearing signal. This conventional start is valid for calls whether charged in accordance with § 2.2.1.1 and § 2.2.1.2.

2.2 *Methods of charging*

2.2.1 In order to avoid too great a dissymmetry in the basis for determining the collection charges, one of the following two methods of charging should be used in the fully automatic international telex service:

2.2.1.1 charging minute by minute; any fraction of a minute shall be charged as one minute;

2.2.1.2 charging by shorter periods either derived by periodic pulse metering of the type used in the national automatic service or derived by a suitable automatic accounting system.

2.3 *Establishment of international accounts*

2.3.1 With the agreement of the transit Administrations concerned, two Administrations should agree to apply one of the following three methods for the establishment of their international accounts:

2.3.1.1 by basing them on the chargeable durations recorded for subscribers, when the outgoing Administration possesses equipment capable of showing these durations;

2.3.1.2 by basing them on the total (actual) duration of calls measured on international circuits in the outgoing international exchange by means of appropriate meters. When, in relations where signalling systems are used that make it impossible to assess the call durations without excessive complications, the Administrations measure the total occupation time of the outgoing circuits, a correction factor should be applied to the traffic figures so as to assess, in total actual call duration, the traffic that is to serve as the basis for preparing the accounts. The corrections to be applied should be determined by agreement between the Administrations concerned;

2.3.1.3 accounting may be dispensed with, or a lump-sum settlement applied, by agreement between the Administrations concerned.

2.3.1.4 In the case of §§ 2.3.1.1 and 2.3.1.2, accounting shall be based on the sum of minutes and, if appropriate, fractions of minutes for all calls (of the given relation) during the accounting period in question, normally one month, the total being rounded up to whole minutes (e.g. 1.3 + 2.4 + 1.1 + 5.6 = 10.4 min which in the monthly account shall be rounded up to 11 min).

2.3.2 If a group of circuits is used both for gentex operation and for automatic telex operation, the method described under § 2.3.1.2 may be allowed only if the meters concerned are not operated in the case of gentex calls.

2.3.3 If a circuit is capable of fully automatic and semi-automatic use, and if, further, the method mentioned under § 2.3.1.2 is applied, the equipment in the international outgoing exchange should be capable of identifying semi-automatic calls so that the meters concerned are not operated in the case of semi-automatic calls.

3 Semi-automatic and manual service

3.1 *Chargeable duration of a call*

3.1.1 The chargeable duration of a telex call begins at the moment the connection is established between the calling and the called subscribers.

3.1.2 It ends at the moment when the clearing signal given by the calling or called subscriber is transmitted over the international circuit. To this end, the international telex position must be able to receive the clearing signal from both sides.

3.2 *Methods of charging*

With manual or semi-automatic operation:

3.2.1 any telex call of three minutes duration or less shall be charged as for three minutes;

3.2.2 when the duration of a call exceeds three minutes, a charge per minute shall be made for the period in excess of the first three minutes. Any fraction of a minute shall be charged as for one minute.

3.3 *Establishment of international accounts*

The international accounts shall be based on the chargeable minutes as defined under §§ 3.2.1 and 3.2.2.

Recommendation D.65

GENERAL CHARGING AND ACCOUNTING PRINCIPLES IN THE INTERNATIONAL TELEX SERVICE FOR MULTI-ADDRESS

MESSAGES VIA STORE-AND-FORWARD UNITS

(Melbourne, 1988)

Preamble

This Recommendation outlines general charging and accounting principles for the international telex service via store-and-forward units (SFUs) in the case of multi-address delivery in the country or network of destination.

1 General principles

1.1 Four types of international telex store-and-forward facility have been defined in Recommendation F.72.

1.2 The only type of facility considered in this Recommendation is the one in which a subscriber in country of origin A, via an SFU in country A, requires delivery in the country of destination B via an SFU in country B of multiple address messages (case b), § 2 of Recommendation F.72: interconnected store-and-forward refers).

1.3 The following tariff components of the service need to be distinguished:

— the international transmission component and

— the destination country component for storage processing and national delivery.

1.3.1 *International transmission component*

The international transmission component refers to the transmission of a message from the SFU in country A to the SFU in country B requesting the establishment of a multi-address in country B.

1.3.2 *Destination country component*

The tariff principles for the destination country component should take into account the cost of storing and processing the message in the SFU as well as the cost for effective deliveries over the national telex network.

2 Collection charges

2.1 Collection charges are a national matter.

2.2 When a message has been effectively delivered to a number of addresses in country B, collection charges are in principle the sum of two components.

2.2.1 The normal collection charge for a single international telex call from the originating subscriber's terminal to the distant country SFU which is a function of message duration including all the addresses.

2.2.2 A charge covering the distant country's SFU storing and processing facility and the national delivery charge which is a function of the number and duration of the messages successfully delivered.

2.3 However, for national reasons, administrations or RPOAs may insert the international transmission component in a single charge per positive delivery in country B, or may adopt any other charging method tending to a total price similar to the one resulting of the application of principles described in § 2.2 above.

2.4 There is no collection charge raised for non-delivery advices sent to the originating subscriber.

3 International accounting

3.1 *International transmission component*

The level and division of the accounting rate applicable to the single international telex call made to the SFU in country B should be based on that normally applied to the international telex service between country A and B.

3.2 *Destination country component*

3.2.1 The destination country should be entitled to remuneration which covers the costs for the use of its SFU (processing and storage functions) and for the delivery costs of multiple address messages successfully delivered over its national network.

3.2.2 It is desirable that the destination country component be expressed as a function of the duration of the message with one address and of the number of the effectively delivered messages.

3.2.3 In the absence of specific cost studies, the establishment of this destination country component will be for bilateral agreement between the administrations concerned.

3.3 *Non-delivery advices*

Non-delivery advice messages should not be included in the international accounts.

3.4 *Status enquiries*

3.4.1 These messages sent back to the origin country A's SFU, by the destination country SFU, at the request of the originating subscriber, may give rise to international accounting. One approach to this facility would be for the origin country to credit the destination country its normal international accounting rate share for such calls, as if the call originated in country A, based on call data provided by country B.

3.4.2 However, subject to bilateral agreement, administrations may agree to forego, on a mutual basis, accounting for such calls.

3.5 *Exchange of accounting data*

3.5.1 The accounting rate related to the international transmission should be exchanged in the usual way between administrations unless otherwise agreed bilaterally.

3.5.2 Special accounts for multi-address messages in the destination country will be settled and exchanged according to bilaterally agreed rules and formats, as long as a specific Recommendation is not issued on this matter.

4 References

CCITT Recommendation F.72 — International telex store-and-forward

CCITT Recommendation D.60 — Charging and accounting in the international telex service.

Recommendation D.67

CHARGING AND ACCOUNTING IN THE INTERNATIONAL TELEX SERVICE

(Geneva, 1976; amended at Melbourne, 1988)

Preamble

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

DIVISION A

COLLECTION CHARGES

1 Fixing of collection charges

1.1 Each Administration shall, subject to the applicable provisions of national law, fix the charges to be collected from its customers. The level of charges is a national matter; however, in establishing them, Administrations should try to avoid too great a dissymmetry between the charges applicable in each direction of the same relation.

1.2 Where, in accordance with national law, a fiscal tax is levied on collection charges for international telecommunication services, this tax shall be collected only in respect of international telecommunication services, billed to customers in that country.

1.3 The charge levied by an Administration on the customer for a particular communication should in principle be the same, in a given relation, regardless of the route chosen by that Administration.

1.4 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:

a) by establishing different charges for each method of operation; or

b) by establishing a single collection charge weighted according to the volume of each type of traffic.

1.5 Safety of life and Government telex calls shall be charged as ordinary private telex calls.

1.6 Charges for telex calls exchanged over emergency routes shall be the same as when the normal route is used.

DIVISION B

INTERNATIONAL ACCOUNTING

1 General

1.1 Procedures relating to remuneration of Administrations of destination and transit countries are as follows:

Bearing in mind, as concerns this element, the location of the international exchange and the distribution of the international traffic within the destination country.
1.2 Destination Administrations will be remunerated by a procedure whereby the origin Administration keeps its revenue and remunerates the destination Administration for the facilities made available, including the international circuit, the international exchange and the national extension either:

a) on the basis of a flat-rate price per circuit (called the *flat-rate price procedure*); or

b) on the basis of traffic units carried (called the *traffic-unit price procedure*);

In either case, the price will be fixed by the destination Administration; or

c) by a procedure whereby accounting revenue is shared between terminal Administrations (called the *accounting revenue division procedure*).

1.3 Transit Administrations will be remunerated for facilities made available, either:

1.3.1 by the *flat-rate price procedure* | elating in the main to direct transit operations; or

1.3.2 by the *traffic-unit price procedure* | elating in the main to switched transit operations.

In either case, the price will be fixed by the transit Administration.

1.4 Application of the flat-rate price procedure should be in accordance with the principles in Recommendation D.160. In fixing flat rate prices, Administrations of countries within the same region should follow the principles in the appropriate Regional CCITT Recommendations.

1.5 In fixing traffic-unit prices, Administrations of countries within the same region should follow the principles in the appropriate Regional CCITT Recommendations. For intercontinental telex relations, Administrations should follow the principles in Recommendation D.60.

1.6 *Traffic unit*

1.6.1 For the purpose of the establishment of accounting rates, the traffic unit of one minute shall be used.

1.6.2 The traffic unit for use in the traffic unit pricing procedure for the measurement of total traffic exchanged is determined by the method of measuring call duration agreed between Administrations for the establishment of their international accounts as provided for in Recommendation F.61.

2 Remuneration of the destination Administration

2.1 *Flat-rate price procedure*

Under this procedure the destination Administration receives payment for the facilities made available by a flat-rate price fixed by it as a price per circuit. The price per circuit would cover:

a) The international circuit section provided by the destination Administration;

b) the use of its international exchange;

c) the national extension

2.2 *Traffic-unit price procedure*

Under this procedure, the destination Administration receives payment on the basis of the price fixed by it per traffic unit. This price will be related to the facilities made available and will take account of:

a) the international circuit section provided by the destination Administration;

b) the use of its international exchange;

c) the national extension

2.3 *Accounting revenue division*

Administrations may agree to divide the total accounting rate into terminal shares payable to the terminal Administrations (and, where appropriate, into transit shares payable to the transit Administrations) in accordance with the principles in Recommendation D.60.

2.4 *Simplification of accounts and use of traffic sampling*

2.4.1 In certain conditions, terminal Administrations may agree not to exchange international accounts when, for example:

a) the balance of settlement of their accounts is normally negligible;

b) the *terminal countries'* traffic levels in both directions are more or less equal;

c) there is approximate equivalence as regards their national extension

2.4.2 Traffic sampling may be used for the establishment of international accounts when the countries involved in a given traffic relation so agree. This sampling may then avoid the necessity for continuous traffic measurements. For example, the samples could cover five working days and could be taken at regular intervals, such as once a year or four times a year, or they could be taken on the occasion of any significant change in the number of circuits in the given relation. Sampling is particularly useful when traffic in any international relationship is reasonably stable.

3 Remuneration of transit Administrations

3.1 *Flat-rate price procedure*

3.1.1 It is recommended that in the case of direct transit via other countries, the Administrations of these direct transit countries should be remunerated for the exclusive use of the facilities made available on the basis of a flat-rate price per circuit.

3.1.2 Under the flat-rate price procedure, the terminal Administrations will ensure that the best possible use is made of the circuits because, if those Administrations provide too few circuits, they pay the penalty in the form of the lower quality of service they offer to their subscribers. If they provide too many circuits, they will have to pay more in remuneration and will be penalized financially.

3.2 *Traffic-unit price procedure*

3.2.1 When transit traffic is not handled on direct circuits, the remuneration for the transit routing in the case of traffic passing by switched transit through one or more countries should be made to the Administration of the first transit exchange used, which fixes a price per unit of handled traffic. This price should also include the remuneration to the other transit Administrations, if any, and to the destination Administration, where appropriate.

3.2.2 The procedure of remuneration to the first transit Administration for the entire routing of the traffic (remuneration of the first transit exchange) is necessary to meet the situation where traffic may be routed through subsequent transit exchanges, each of which, under automatic operation, will be unable to identify the origin country of the traffic. This procedure makes the source of the traffic irrelevant for the establishment of accounts. Depending on the accounting methods in force between Administrations, the remuneration of the first transit centre may or may not include payments for use of the facilities of the destination country.

3.3 *Establishment of a switched-transit relation*

3.3.1 Before switching traffic via a transit exchange, the origin Administration will request the country in which the first switching transit exchange is situated for a price quotation per transit traffic unit to the destination country.

3.3.2 The Administration of the country to which the first transit exchange belongs advises the price per traffic unit for handling the traffic from the transit exchange to the destination country, including remuneration of the latter country where appropriate. This price may be set by the Administration to which the transit exchange belongs on the basis either of a special study or of a price already fixed for the transit routing to the same terminal country of traffic originating in other countries.

3.3.3 The Administration of any country with traffic to be routed in transit may, of course, find it advisable to consult the Administrations of several countries to ascertain which transit routing is the most economical.

3.3.4 The consultations by the origin Administration regarding the transit routing (by switching) of its traffic should be in accordance with the principles of the international routing plan described in Recommendation F.68.

3.4 *Calculation of the remuneration to the first transit Administration on the basis of traffic units*

3.4.1 Remuneration to the Administration of the switched-transit country depends on the number of traffic units handled by its transit exchange.

3.4.2 For the establishment of international accounts, the origin Administration should determine the volume of traffic in minutes of call duration routed each month towards each destination country through this transit exchange.

3.4.3 An alternative version of this system can be contemplated when the traffic to the destination country routed via a given international transit centre is sufficiently stable; the origin Administrations and the first transit exchange might then agree to settlement on the basis of an estimated number of traffic units determined by means of traffic sampling and subject to periodic revision (such as once a year or four times a year).

3.5 *Use of emergency/overflow transit routes*

Where use is made of emergency or overflow transit routes, Administrations should follow the provisions of Recommendation D.60.

4 Examples of the various procedures

Examples of the various procedures are given in Recommendation D.150, Annex B.

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SECTION 7

CHARGING AND ACCOUNTING IN THE INTERNATIONAL FACSIMILE SERVICE

Recommendation D.70

GENERAL TARIFF PRINCIPLES FOR THE INTERNATIONAL PUBLIC FACSIMILE SERVICE BETWEEN PUBLIC BUREAUX

(BUREAUFAX SERVICE)

(Geneva, 1980; amended at Melbourne, 1988)

Preamble

This Recommendation sets out the general principles and conditions for tarification to be applied by Administrations (postal or telecommunications) for the provision of bureau to bureau facsimile document

services using public facsimile stations (Bureaufax Service) this Recommendation, the terms ‘‘postal Administration’’ and ‘‘telecommunications Administration’’ shall be defined as follows:

— **postal Administration** : Administration, or part of a combined postal and telecommunications Admini stration, concerned with the provision of postal services;

— **telecommunications Administration** : Administration, or part of a combined postal and telecommunications Administration, concerned with the provision of telecommunications services.

1 General principles

In determining tariff principles to be applied to this service, consideration should be given to the structure and level of charges applicable to other international telecommunication services supplied by the Administrations concerned, and to the provisions of Recommendation D.5.

2 Charging principles

2.1 In principle, a charge per page shall be levied on senders by Administrations for the utilization of the international public facsimile service between public bureaux. This shall apply regardless of the

telecommunication facilities (public networks or dedicated circuits) or type of facsimile terminals used between public bureaux. The origin Administration may decide not to levy a general handling charge or a charge for the transmission on a separate page (where this is considered necessary) of preamble and address details only. The decision whether or not to levy a charge in such cases is a national matter.

See also Recommendations F.160 [1] and F.170 [2].

2.2 In accordance with the Recommendation cited in [3], documents for facsimile transmission shall be accepted up to a maximum size, normally ISO A4 size (210 × 297 mm), or exceptionally up to a larger size, e.g. the North American ‘‘legal’’ format (216 × 356 mm) by bilateral agreement between Administrations. A chargeable page is that part of a document page which is reproducible by facsimile equipment.

2.3 Separate charges for special handling in the national collection and/or delivery of facsimile documents may be levied on the sender and/or the addressee, as appropriate, by the respective originating and/or destination Administration.

3 International accounting

3.1 Accounting rates between Administrations in the international public facsimile service between public bureaux shall be established either on a per page basis or in the same manner as for normal calls over the international public network utilized. Alternatively, Administrations may, by bilateral agreement, account for only bureau handling costs on a per page basis, the use of the international public network being payed for as a function of the duration of use. Where a per page accounting is adopted, by agreement between the Administrations concerned, the transmittal sheet may be excluded from the international accounts unless the lower part contains a message for the addressee. The same procedure is applicable to refunds.

3.2 Where accounting between Administrations is on a per page basis, Administrations shall exchange monthly statements with respect to documents transmitted, showing necessary details for the settlement of accounts, such as the number of pages transmitted and if necessary, the number of documents transmitted, and applicable accounting rates and shares. Where accounting between Administrations is effected in the same manner as for normal calls over the international public network utilized, facsimile transmissions shall form an integral part of the international accounts for that public network.

3.3 Any separate charges for special handling levied on the sender or on the addressee by an Administration for national collection and/or delivery or cancellation are normally not subject to accounting between Administrations.

The Federal Republic of Germany has expressed reservations regarding the application of the provisions of §§ 3.4 and 3.5.
3.4 Transferred account services may be offered subject to bilateral agreement between Administrations and in accordance with appropriate CCITT Recommendations

3.5 If an Administration has accepted a refund claim , the refunded facsimile document charge should not appear in the international accounts, but the other Administrations concerned should be so notified

4 Service correspondence

4.1 Subject to formal agreement by the Administrations providing the Bureaufax service , the following shall be free of charge and shall not involve international accounting:

a) service Bureaufax documents exchanged between the Administrations concerned;

b) service Bureaufax documents relating to the official business of the ITU, exchanged between Administrations on the one hand, and the Chairman of the Administrative Council of the ITU, the Secretary-General of the ITU, the Director of the CCITT, the Director of the CCIR and the Chairman of the IFRB, on the other hand;

c) franking privilege Bureaufax documents where consistent with national law.

4.2 § 4.1 above does not apply to service and franking privilege Bureaufax documents exchanged over international public telecommunication networks by postal Administrations except by agreement with the telecommunication

Administrations concerned.

5 Refunds

5.1 Refund of charges for the utilization of the international public facsimile service between public bureaux may be permitted at the discretion of the Administration, and in accordance with the following conditions. (The provisions on cancellation of facsimile documents are given in the Recommendation cited in [4].)

5.2 *A full refund* | ay be granted when a facsimile document has been cancelled *before* connection with the addressee has been established. However, a cancellation charge may be imposed and ‘‘special handling’’ charges, if any, will not normally be refunded in such instances.

5.3 *A full or partial refund* | ay be granted if transmission and/or *delivery* of the entire document or a part of it cannot be effected through no fault of the sender and/or addressee or their agents.

5.4 *A partial refund* | ay be granted for any page of a document which is not accepted by the addressee because of poor quality and because the service instruction ‘‘Risques exp´editeur’’ does not appear in the preamble of the affected pages. Documents not accepted by the addressee cannot be retained by him. However, if the addressee accepts certain pages of the document, no refund will be granted for those pages.

5.5 *A partial refund* | ay be granted in the case of multipage documents, when the document is cancelled *before* transmission is *completed* . The partial refund will only apply to those pages for which transmission has not begun. A cancellation charge may be imposed and ‘‘special handling’’ charges, if any, will not normally be refunded in such instances.

5.6 *No refund* | ill be granted when a request for cancellation of a document has been received at the sending bureau *after* transmission has been *completed* , or when transmission of a single page document has *begun* .

5.7 *No refund* | ill be granted when the sender has been advised that the quality of the original is unsuitable for satisfactory transmission and the service instruction ‘‘Risques Exp´editeur’’ appears in the transmittal sheet. In the case of a multipage document, no refund will be granted for any page transmitted under these conditions.

5.8 All claims for refunds of charges must be presented within 3 months of the date of receipt of the document at the receiving bureau. Normally, such claims will require appropriate documentation of the sender’s or addressee’s claim.

5.9 Should an Administration deem it desirable to destroy the relevant documents before the expiration of the period during which international accounts may be challenged in accordance with the *Telephone and Telegraph Regulations* [5], and hence is not in a position to carry out an enquiry in respect of the services for which it is responsible, such Administration shall bear any difference in the international account or any refund of charges that may arise.

References

[1] CCITT Recommendation *General operational provisions for the international public facsimile services* , Vol. II, Rec. F.160.

[2] CCITT Recommendation *Operational provisions for the international public facsimile service between public bureaux (Bureaufax)* , Vol. II, Rec. F.170.

[3] *Ibid.* , § 2.1.

The Federal Republic of Germany has expressed reservations regarding the application of the provisions of § 5, ‘‘Refunds’’.

[4] *Ibid.* , § 10.

[5] Find Acts of the World Administrative Telephone and Telegraph Conference (Geneva, 1973) — Telegraph Regulations — Telephone Regulations, ITU, Geneva, 1973. (See also the Preliminary Note No. 3, page XIV).

Recommendation D.71

GENERAL TARIFF PRINCIPLES FOR THE PUBLIC FACSIMILE SERVICE BETWEEN SUBSCRIBER STATIONS

(TELEFAX SERVICE)

(Geneva, 1980)

Preamble

This Recommendation sets out the general principles and conditions for tarification to be applied by Administrations for the provision of an international public facsimile service between subscriber stations, using the international public switched telephone network or international Datel network (Telefax service)

1 General Principles

In determining the tariff principles to be applied in this service, consideration should be given to the structure and level of charges applicable in other international telecommunication services supplied by the Administrations concerned and to the provisions of Recommendation D.5.

2 Charging principles

2.1 In principle, the charges for calls in the international Telefax service shall be based on those applied for the normal use of the network concerned.

2.2 Administrations may apply additional charges for the provision of user facsimile station equipment and/or special facilities.

3 International accounting

3.1 Normally, accounting for calls in the international Telefax service shall be at the same accounting rates and be effected in the same manner as accounting for calls over the international public network utilized. Such calls will form an integral part of the international accounts for that public network and no additional accounting between Administrations should be necessary for such calls.

Some Administrations do not permit the international public switched telephone network to be used for facsimile transmission.

The Datel network is a public network composed of special quality voice grade circuits

(normally conforming to the specifications of Recommendation M.1020 [1]) or telephone circuits assigned to the Datel service. These circuits enable the Administrations to permit customer transmission of data and/or facsimile documents on an assured basis.

See also Recommendation F.160 [2] as well as the Recommendation cited in [3].

In the case where different accounting rates are applied for Telefax calls, accounting for those calls should be listed separately.

The same procedures are applicable to refunds.

3.2 Any additional charges applied by an Administration for the provision of user facsimile station equipment and/or special facilities shall be retained by that Administration and shall not be included in the international accounts.

3.3 Collect and transferred account services may be offered subject to bilateral agreement between Administrations and in accordance with appropriate CCITT Recommendations.

4 Service correspondence

4.1 Subject to formal agreement by the Administrations providing the Telefax service, the following shall be free of charge and shall not involve international accounting:

a) service Telefax calls exchanged between the Administrations concerned;

b) service Telefax calls relating to the official business of the ITU, exchanged between Administrations on the one hand, and the Chairman of the Administrative Council of the ITU, the Secretary-General of the ITU, the Director of the CCITT, the Director of the CCIR and the Chairman of the IFRB, on the other hand;

c) franking privilege Telefax calls where consistent with national law.

The terms ‘‘postal Administration’’ and ‘‘telecommunication Administration’’ are defined as follows:

— **postal Administration** : an Administration, or the part of a combined postal and telecommunication Administration, concerned with the provision of postal services;

— **telecommunication Administration** : an Administration, or the part of a combined postal and telecommunication Administration, concerned with the provision of telecommunication services.

4.2 § 4.1 above does not apply to service and franking privilege Telefax calls exchanged over international public telecommunication networks by postal Administrations except by agreement with the telecommunication Administrations concerned.

5 Refunds

5.1 Charges for calls in the international Telefax service may be refunded at the discretion of Administrations, when circuit failure or failure of equipment provided by the Administrations prevents satisfactory transmission. However, refund of charges may not be applicable where transmission over a public network is permitted on an ‘‘unassured’’ basis, that is, without guarantee as to transmission speed and/or quality of transmission.

5.2 To obtain a refund, the subscriber shall apply to the Administration responsible for his facsimile service, submitting in support of his claim for a refund the original document and the faulty copy received at the destination point, when such is required.

References

[1] CCITT Recommendation *Characteristics of special quality international leased circuits with special bandwidth conditioning* , Vol. IV, Rec. M.1020.

[2] CCITT Recommendation *General operational provisions for the international public facsimile services* , Vol. II, Rec. F.160.

[3] CCITT Recommendation *General operational provisions for the international public facsimile service between subscriber stations* (Telefax), Vol. II, Rec. F.180, § 5.

Recommendation D.73

GENERAL TARIFF AND INTERNATIONAL ACCOUNTING | PRINCIPLES FOR INTERWORKING BETWEEN THE INTERNATIONAL | BUREAUFAX AND

TELEFAX SERVICES

(Malaga-Torremolinos, 1984)

Preamble

This Recommendation sets out the charging and international accounting principles applicable by Administrations for the transmission of facsimile documents in both directions between subscribers to the Telefax service and public facsimile bureaux

1 General principles

In determining the tariff principles to be applied to this service, consideration should be given to the structure and level of charges applicable to other international telecommunication services supplied by the Administrations concerned, and to the provisions of Recommendation D.5.

2 Charging principles

2.1 *International transmission of facsimile documents from a public bureau to a subscriber station in another country*

The originating Administration should charge:

a) either on a per page basis, as described in Recommendation D.70, § 2 relating to the Bureaufax service,

b) or on the normal call charge for the international network used.

In the case of b), the originating Administration may levy on the sender a separate charge for handling and, where appropriate, for national collection of the facsimile document, in addition to the call charge for the international network used.

2.2 *International transmission of facsimile documents from a subscriber station to a public bureau in another country*

The Administration of destination should charge:

See Recommendation F.190 [1].

a) either on a per page basis, as described in Recommendation D.70, § 2,

b) or an amount which covers the cost of handling of the facsimile document and, where appropriate, for national delivery to the addressee.

It may be necessary for all charges applied by the Administration of destination for handling of the facsimile document , including, where approriate, for national delivery, to be levied on the addressee in accordance with national arrangements.

3 International accounting principles

3.1 Generally speaking, accounting procedures for interworking between the international Bureaufax and Telefax services should be based on the same accounting rates and be effected in the same manner as for the calls set up normally on the international public network used. These facsimile calls are an integral part of the international accounts for the public network and should not give rise to any additional accounting measures between Administrations.

3.2 Any charge levied by an Administration for the handling of the facsimile document or for national collection or delivery, or for cancellation should be retained by that Administration and not appear in the international accounts.

3.3 The collect call facility and the transferred accounts service may be admitted subject to bilateral agreement between the Administrations concerned and subject to the provisions of the relevant CCITT Recommendations.

4 Refunds

4.1 Refund or cancellation of charges may be permitted at the discretion of Administrations in accordance with the following conditions.

4.2 *Public bureau to subscriber station transmissions*

In the case of transmission from a public bureau to a private subscriber station in a destination country, refund of charges may be permitted in accordance with Recommendation D.70, § 5.

4.3 *Subscriber station to public bureau transmissions*

4.3.1 In the case of transmission from a private subscriber station to a public bureau in a destination country, no charge will normally be levied on the sender or addressee by the destination Administration:

a) if delivery of the entire facsimile document cannot be effected through no fault of the sender and/or addressee or their agents, or

b) where applicable, for any page of a facsimile document which is not accepted by the addressee because of poor quality and where the service instruction ‘‘risques expediteur’’ does not appear in the preamble of the affected pages. Pages not accepted by the addressee cannot be retained by him; however, if the addressee accepts certain pages of the document, no cancellation of charges will be granted for those pages.

4.3.2 Where a facsimile document is cancelled during or after reception by the public bureau from the private subscriber station but before delivery to the addressee, it is at the discretion of the destination Administration whether or not to charge for handling of the document by the public bureau. A cancellation charge may be imposed in such circumstances.

4.3.3 No refund shall normally be allowed of charges incurred by the originating subscriber in respect of calls from a private subscriber station to a public bureau, except where this is permitted under the normal refund arrangements for the public network used.

5 Service correspondence

Subject to formal agreement by the Administrations providing interworking between Bureaufax and Telefax services, service documents sent from a Bureaufax to a Telefax station shall be free of charge, and shall not involve international accounting.

Reference

[1] CCITT Recommendation — *Operational provisions for the international facsimile service between public bureaux and subscriber stations and vice versa* , Rec. F.190.

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SECTION 8

CHARGING AND ACCOUNTING IN THE INTERNATIONAL PHOTOTELEGRAPH SERVICE

Recommendation D.80

ACCOUNTING AND REFUNDS FOR PHOTOTELEGRAMS

(Melbourne, 1988)

1 Accounts

1.1 *Between public stations*

1.1.1 Accounting methods for charges levied for traffic between public stations shall be the same as for telegram charges. These accounts shall constitute a special section in the telegraph accounts.

1.2 *From a public station to a private station*

1.2.1 Accounting methods for charges levied for these phototelegrams shall be the same as for telegram charges. When the accounts are established by the destination country, the public station shall inform the international phototelegraph position in its country of the particular scale of charges pertaining to each phototelegram. The latter station, when booking the call, shall pass this information on to the IPP in the destination country for accounting purposes.

1.2.2 This accounting shall constitute a special section in the telegraph accounts. The special surcharge for use of the public station is retained by the Administration governing the public station.

1.3 *From a private station to a public station*

1.3.1 Accounting methods for charges in connection with the use of telephone circuits are governed by Recommendation D.81.

1.3.2 The special surcharge applying to the use of a public station is retained by the Administration operating the public station.

See also Recommendation F.80.

2 Refunds

2.1 *Between public stations*

2.1.1 The sender of a phototelegram or his authorized representative may, on establishing his status and identity, cancel his phototelegram only if it has not been transmitted by the office of origin.

2.1.2 The charge paid for a phototelegram that has been cancelled shall be refunded, but the Administration concerned may retain a cancellation charge. The latter shall be equal to one-third of the phototelegram first step charge in the service in question, when the call has been partly or completely set up.

2.1.3 In principle the provisions of § 2.1.2 above shall also apply to phototelegrams payable by the addressee or by a third party.

2.1.4 The charges collected shall be refunded to the sender if the phototelegram does not reach its destination, except if it has been sent by post.

2.1.5 If the addressee lives in the locality of the incoming station, the charges shall also be refunded if the period between handing in and the time when the phototelegram is delivered to the addressee exceeds 8 hours in the European system, or 20 hours in the extra-European system.

2.1.6 When a phototelegram is sent by post to the outgoing public station, the time required for the postal delivery shall not be counted against the phototelegraph service. In this case the time of arrival at the public station should be taken into consideration when calculating any delay.

2.1.7 If the addressee does not live in the locality of the incoming station the periods specified above, which justify a refund, shall be reckoned from the time of handing in to the time of delivery to the postal service.

2.1.8 There shall be no refund of a charge that has been collected if the phototelegram includes in its preamble the service instruction **RISQUES EXPEDITEUR** .

2.2 *From a public station to a private station*

2.2.1 The points covered in §§ 2.1.1 to 2.1.3 above are also applicable when the phototelegram is cancelled or when it is refused by the addressee.

2.2.2 Charges may not in general be refunded or waived, unless transmission has failed to take place or has been faulty, owing to circuit interruption or to faults in the public station's equipment. Refund of charges shall be left to the discretion of the Administration to which the public station belongs.

2.3 *From a private station to a public station*

2.3.1 The provisions for the cancellation of telephone calls also apply to the cancellation of phototelegraph calls.

2.3.2 If a phototelegram is cancelled, the Administration of the outgoing country shall collect the surcharge required for the intervention of the public station. If the private station desires, the received phototelegram will be sent to this station by post.

2.3.3 If, in the case of retransmission by a public station, cancellation is requested before the next circuit has been provided but after the phototelegram has been received by the public station responsible for the proposed retransmission, the sender shall pay at least the charge normally applicable to terminal phototelegraph traffic on the route followed.

2.3.4 The provisions of §§ 2.1.4 to 2.1.8 above shall apply as regards the waiving of charges when phototelegrams are not delivered or are delivered too late.

Recommendation D.81

ACCOUNTING AND REFUNDS FOR PRIVATE PHOTOTELEGRAPH

CALLS

(Melbourne, 1988)

1 Accounting

1.1 The accounts of charges for phototelegraph calls between private stations or between an (outgoing) private station and an (incoming) public station are established in the same way as the accounts for telephone charges. They shall be shown in a special section of the telephone accounts.

See also Recommendation F.80 | fIbis .

1.2

If the Administration agrees to grant a refund after a call has been cleared, the charge for the phototelegraph call shall be refunded and will not be included in the international accounts.

1.3 If the refund is granted only after dispatch of the international accounts, the cost of it shall be borne by the Administration that posted the relevant charge to its account.

2 Refunds

2.1 *General*

The provisions relating to cancellation of a telephone call request or refusal of a call are also applicable to phototelegraph calls between private stations or between (outgoing) private stations and (incoming) public stations.

2.2 *Calls between private stations*

2.2.1 No charge is collected when, on account of faulty circuits, the transmission has not taken place or has not been concluded provided that the operator who accepted the request for the phototelegraph call has been informed of the situation.

2.2.2 To obtain refunds when it is seen that, after interruption of the call, the transmission was faulty, the phototelegraph station having paid the charge for the queried call should apply to its Administration, accompanying its request for a refund with the original of the picture and the faulty proof received at the other end.

2.3 *Calls from a private station to a public station*

Charges shall not in general be waived unless transmission has failed to take place or has been defective owing to circuit interruption or to faults in the public station's equipment. Refunds shall be left to the discretion of the Administration to which the public station belongs.

Recommendation D.83

RATES FOR PHOTOTELEGRAMS AND PRIVATE PHOTOTELEGRAPH CALLS

(Melbourne, 1988)

The CCITT,

considering

(a) that phototelegraph calls are frequently set up on circuits normally used for telephone traffic;

(b) that the holding time of these circuits used depends not only on the duration of the phototelegraph transmission proper but also on the time needed to prepare the call and return the circuits used to the telephone service;

(c) that when a phototelegram is handled, the cost includes the handing in and delivery expenses as well as the cost of using public phototelegraph stations,

considering, furthermore

(d) that the phototelegraph equipment in service may have different drum diameters;

(e) that the duration of transmission of a phototelegram is in fact the essential criterion for the calculation of the charge to be applied;

(f) that this duration depends simply on the dimension along the axis of the drum on the transmitting equipment;

(g) that the chargeable duration for phototelegrams should be related to the drum diameter of the sending equipment;

(h) that charging of phototelegrams on the basis of their surface area should continue to be applied only in cases where the Administrations concerned explicitly agree to do so,

unanimously declares the view

1 In continental relations

1.1 *General*

1.1.1 Phototelegrams deposited by a public station, either with another public station or with a private station, should be charged for according to the same principle, i.e. a fixed tariff, with various charging steps.

1.1.2 Charges for phototelegraph calls between private stations or between a private (outgoing) station and a public (incoming) station should be reckoned at the same rates as telephone calls, depending on the charging period concerned (heavy-traffic or light-traffic period).

1.1.3 However, the charge for the actual period of use should be increased by a surcharge of four minutes corresponding to the time needed to prepare the call and to restore the circuits to the telephone service.

1.1.4 In addition, for calls from a private station to a public station, the Administration responsible for the public station should levy a special charge for the use of the public station.

1.2 *Phototelegraph calls booked by a public station*

1.2.1 The rates for phototelegrams between public stations, with the exception of charges for special services, and the shares of charges accruing to Administrations should be calculated in accordance with Table 1/D.83.

Tableau 1/D.83 [T1.83], p.

1.2.2 The rates for phototelegrams transmitted by a public station to a private station and the shares accruing to Administrations should be calculated in accordance with Table 2/D.83.

1.2.3 The lengths of phototelegrams are measured in centimetres, a fraction of a centimetre being reckoned as a full centimetre.

1.2.4 For divided phototelegrams, the charge is calculated separately for each part.

1.3 *Phototelegraph calls booked by a private station*

1.3.1 The charge for a phototelegram transmitted by a private station to a public station deposited by phototelegraphy, or vice versa, at the request of the private stations (collected by phototelegraph) and the shares accruing to Administrations should be calculated in accordance with Table 3/D.83.

Tableau 2/D.83 [T2.83], p.

Tableau 3/D.83 [T3.83], p.

1.3.2 Charges for phototelegraph calls between private stations, and the shares accruing to Administrations are calculatd in accordance with Table 4/D.83.

Tableau 4/D.83 [T4.83], p.

1.3.3 If a private station books an **URGENT** phototelegraph call, the rates for the corresponding unit telephone call should be applied.

1.3.4 In relations where reversed-charge phototelegraph calls are allowed, the rules governing such calls should be agreed upon by the Administrations concerned.

2 In intercontinental relations

2.1 When submarine cable or satellite circuits are used for phototelegraph traffic, charges for phototelegrams and for phototelegraph calls shall be based on the same principle as in continental relations (see the provisions in § 1 above).

2.2 For divided phototelegrams in intercontinental relations, the charge is calculated separately for each part.

Recommendation D.85

CHARGING FOR INTERNATIONAL PHOTOTELEGRAPH CALLS TO MULTIPLE DESTINATIONS

(Melbourne, 1988)

1 Charging

Multiple calls from a public station raise no problems as regards charging. Each phototelegram is charged individually, even in cases where the same picture forms subjects of different phototelegrams transmitted simultaneously.

For calls from a private station, the following provision is to be observed:

2 Charging for further dissemination

Charges for national calls set up at the request of a main receiving station, with a view to further dissemination, are collected from the calling party and are not included in international accounts.

See also Recommendation F.85.

SECTION 9

CHARGING AND ACCOUNTING IN THE MOBILE SERVICES

Recommendation D.90

CHARGING, ACCOUNTING AND REFUNDS IN THE | MARITIME MOBILE SERVICE

Introductory Notes

1 Pursuant to Resolutions Nos. Mar2 **|** (em **|** 2 and Mar2 **|** (em **|** 3 and Recommendation Mar2 **|** (em **|** 8 of the *World Maritime Administrative Radio Conference* , [1] [8] the CCITT drew up Recommendations E.200/F.110 and D.90/F.111 concerning operational and accounting provisions for the Maritime Mobile Service. Having accepted the conclusions of the CCITT studies, the *World Administrative Radio Conference* , [2] adopted texts dealing with the basic principles on operating and accounting procedures, leaving the detailed application of these principles to be covered by CCITT Recommendations.

2 Article 66 (No. 5085) of the *Radio Regulations* [3] specifies that the provisions of the *Telegraph Regulations* [4] and the *Telephone Regulations* [4], taking into account CCITT Recommendations, shall apply to radiocommunications in so far as the relevant provisions of the *Radio Regulations* do not provide otherwise.

3 Since, in accordance with Article 69 of the *Radio Regulations* , Article 66 entered into force on 1 January 1981, the provisions of this Recommendation were applicable from that date.

4 References commencing with the letters A, B, C and D concern provisions in Divisions A, B, C and D respectively of Recommendation E.200/F.110 entitled *Operational provisions for the maritime mobile service* .

5 For the purpose of this Recommendation the term *Maritime Mobile Service* should be understood to embrace the Maritime Mobile-Satellite Service as well as the MF, HF, VHF and UHF radio media, unless specifically stated otherwise.

6 Throughout this Recommendation the term Administration means that recognized private operating agency/agencies are included. However, where this term is used in respect of notification by Administrations to the General Secretariat of the ITU, this applies only to recognized private operating agencies that have been authorized by Administrations to carry out such notification.

7 For the purpose of this Recommendation, the terms *mobile station* and *land station* should be considered as analogous to *ship station* and *coast station* respectively used in the *Radio Regulations* [3].

DIVISION D NF03/004

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b) Tableau Rec. F11

— Tableau Rec. F11

1) Tableau Rec. D.90 — OPM: NF08/007, NF10/006

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CONTENTS

DIVISION J

GENERAL

1 Definitions

J1 1.1 **accounting authority**

F: autorité chargée de la comptabilité

S: autoridad encargada de la contabilidad

The Administration of the country that has issued the licence for a mobile station (or the recognized private operating agency or other entity/entities designated by the Administration in accordance with L1 to L6) to whom maritime accounts in respect of mobile stations licensed by that country may be sent.

J2 1.2 **accounting authority identification code (AAIC)**

F: code d'identification de l'autorité chargée de la comptabilité (CIAC)

S: código de identificación de la autoridad encargada de la contabilidad (CIAC)

The discrete identification code of accounting authority responsible for the settlement of maritime accounts (see Annex A).

J3 1.3 **maritime account**

F: compte maritime

S: cuenta radiomarítima

The account issued by the Administration operating a land station in respect of telecommunication traffic exchanged between the land station and a mobile station.

J4 1.4 **landline charge**

F: taxe de ligne

S: tasa de línea

The charge relating to transmission over the general network of telecommunication channels, national and international.

J5 1.5 **land station charge**

F: taxe terrestre

S: tasa terrestre

The charge relating to the use of facilities provided by the land station in the maritime mobile services or by the earth station in the Maritime Mobile-Satellite Service. In the Maritime Mobile-Satellite Service, this charge shall include all space segment costs. An Administration may also choose to present its total land station charge in its component parts.

J6 1.6 **mobile station charge**

F: taxe de station mobile

S: tasa de estaci´on m´ovil

The charge collected on board by the mobile station relating to the use of facilities provided by the mobile station.

DIVISION K

CHARGING

1 General

1.1 *General*

K1 1.1.1 The charges for radiocommunications consist of:

K2 a) the landline charges ;

K3 b) the land station charges ;

K4 c) any charges for special services for telegrams that have to be considered in the accounting; and

K5 d) any special charges for special facilities.

K6 1.1.2 The landline charge for national telecommunication channels applicable to radiocommunications between a mobile station and the country of the land station is notified either in special drawing rights (SDRs) or in gold francs to the ITU General Secretariat by the land station Administration.

K7 1.1.3 The landline charges applicable to radiotelecommunications between a mobile station and a country other than that of the land station shall be:

a) the collection charges fixed or applied for telecommunications services in the international relation concerned; or

b) included in a combined charge covering both the landline and the land station, the level of which is fixed by the land station Administration.

K8 1.1.4 The landline charges and land charges expressed in SDRs or gold francs, shall be notified to the ITU General Secretariat by the land station Administration responsible for fixing them.

K9 1.1.5 The landline and land station charges notified to the ITU General Secretariat in accordance with K6 to K8 will be published in the *List of Coast Stations* [5].

Note — For countries that have not introduced banded collection charges for international services, only a limited number of charges, for routes in frequent use, will be published. Administrations of these countries should indicate to the ITU General Secretariat which charges should be published in the *List of Coast Stations* [5].

K10 1.1.6 The Administration of the country that has issued the licence for a mobile station may authorize it to collect on board and to retain mobile station fees. The Administration may set an upper limit to these fees.

K11 1.1.7 Mobile stations must be acquainted with the tariffs necessary for charging. However, they are authorized, where necessary, to obtain such information from land stations. Charges furnished by land stations are expressed either in SDRs or in gold francs.

1.2 *Tariff changes*

K12 New or modified charges shall not come into effect for international traffic for countries other than the one which establishes the charges until the first day of the month following expiry of the period specified below. The period will be counted from the day after the publication date of the ITU Operational Bulletin which contains this notification. Administrations providing information for publication in the Operational Bulletin should observe the deadlines indicated in the Bulletin in forwarding this information to the ITU General Secretariat.

The period to be taken into account is as follows:

K13 a) for traffic from mobile station to land: 1 month and 15 days;

K14 b) for traffic from land to mobile station: 15 days, except for changes to bring charges into line with those on competing routes, in which case the period shall be 10 days.

1.3 *Radiocommunications between mobile stations*

K15 1.3.1 When a single land station is used as an intermediary between mobile stations, two land station charges are collected. If the land station charge applicable to traffic with the origin mobile station is different from that applicable to traffic with the destination mobile station, the sum of these two charges is collected.

K16 1.3.2 When it is necessary to use two land stations as intermediaries between two mobile stations, the land station charge for each station is collected and also the landline charge for the section between the two land stations.

2 **Radiotelegrams**

2.1 *General*

K17 2.1.1 The land station charge and the mobile station charge are fixed on the basis of a word charge.

The general provisions for the counting of words are defined in Recommendation F.1, and are published in the manual for use by the Maritime Mobile and Maritime Mobile Satellite Services.

Particular attention is directed to Recommendation F.1, §§ A.115 to A.128 to ensure proper application of these provisions.

K18 2.1.2 The total charge of radiotelegrams is collected from the sender.

K19 2.1.3 No additional charge shall be made when acknowledgement of receipt of a radiotelegram is made through another mobile station or land station by service advice, or when an intermediate mobile station assists in the forwarding of a radiotelegram.

2.2 *Special charging arrangements*

2.2.1 *Radiotelegrams of immediate general interest*

K20 No charge for radio transmission in the Maritime Mobile Service is made for radiotelegrams of immediate general interest, provided that they are:

K21 a) distress messages or replies thereto;

K22 b) radiotelegrams originating in mobile stations notifying the presence of icebergs, derelicts, mines and other dangers to navigation, or announcing cyclones and storms;

K23 c) radiotelegrams originating in mobile stations announcing unexpected phenomena threatening air navigation or the sudden occurrence of obstacles at airports;

K24 d) radiotelegrams originating in mobile stations notifying sudden changes in the position of buoys, the working of lighthouses, devices connected with buoyage, etc.; or

K25 e) service radiotelegrams relating to the maritime mobile service.

2.2.2 *Radiotelegrams relating to medical advice*

K26 No charge for radio transmission is made for radiotelegrams relating to medical advice provided that:

K27 a) they are exchanged directly between mobile stations and land stations that are shown in the *List of Radiodetermination and Special Service Stations* [7] as providing such a service, and,

K28 b) they are addressed in accordance with the conditions indicated in that List.

2.2.3 *Meteorological radiotelegrams*

K29 Land station charges applicable to me teorological radiotelegrams should be reduced by at least 50% in all relations.

2.2.4 *Radiotelegrams concerning persons protected in time of war*

K30 2.2.4.1 Radiotelegrams concerning persons protected in time of war by the *Geneva Conventions* of 12 August 1949, are accepted under the conditions specified in § 4 of the Annex to the *Telegraph Regulations* [4] taking into account CCITT Recommendation F.1.

K31 2.2.4.2 The land station charges for these **RCT** radiotelegrams shall be decreased in the same proportion as specified for **RCT** telegrams in CCITT Recommendation F.1.

2.2.5 *Radiomaritime letters*

K32 2.2.5.1 Except as otherwise provided in K33 to K37, radiomaritime letters may be accepted, taking into account CCITT Recommendations relating to letter telegrams, if the telegram service is used to convey radiomaritime letters.

K33 2.2.5.2 The total charge shall include the postal charge (by ordinary letter or airmail letter) due for delivery in the land station country.

K34 2.2.5.3 An additional charge may be collected where delivery is to be made to a country other than that of the land station.

K35 2.2.5.4 The following charges are added where applicable:

K36 a) charges due for special services;

K37 b) the landline charge when transmission on the land section is exceptionally by telegraph.

3 Radiotelephone and radiotelex calls

3.1 *Land stations and landline charges*

K38 3.1.1 If no uniform charges apply in respect of the land stations of a country, different land station charges shall be fixed for the MF, HF and VHF bands and for the Maritime Mobile-Satellite Service.

K39 3.1.2 If, due to the lack of technical facilities, no extra charges apart from the normal international landline charges can be levied by the origin Administration, no land station charges will be collected for international automatic VHF radiotelephone calls in the to-mobile station direction, if so decided by the land station Administration. The *List of Coast Stations* [5] shall indicate which Administrations accept such calls without levying land station charges.

K40 3.1.3 The unit charge is the charge for an ordinary private call of one-minute duration except when provision K44 is applied for automatic operation.

K41 3.1.4 The minimum charge for a manual, single-operator or semi-automatic call is three units.

K42 3.1.5 Automatic calls should be charged by one of the following two methods, taking into account CCITT Recommendations:

K43 a) charging minute by minute ;

K44 b) charging by periodic pulses of the type used in the national automatic service.

K45 3.1.6 The charge for a call is normally collected from the calling party with the exception of collect calls (if collect calls are admitted). For collect calls, the charge shall be payable by the called party.

K46 The called party must accept responsibili ty for collect charges prior to transmission of the communications involved. This may be accomplished by:

K47 a) acceptance on a message basis, as for public message telephone service;

K48 b) acceptance on a continuing basis for land station charges and landline charges, depending upon the service involved.

K49 3.1.7 When handled through a land station, the chargeable duration of a manual or single-operator call will be fixed at the end of the call by the land station; if two land stations are participating in the handling of the call, the opinion of the land station that accepted the call from the originating mobile station will prevail.

K50 3.1.8 The decision of the land station according to K49 will also be valid for international accounting.

3.2 *Special charges*

K51 3.2.1 The special charges for personal radiotelephone calls (from mobile station to land) for either credit card or collect calls , if admitted, shall be applied with manual or semi-automatic operation.

K52 3.2.2 No special charges for personal radiotelephone calls to mobile stations handled by manual or single-operator service shall be applied in the Maritime Mobile Service, with the possible exception of the Maritime Mobile-Satellite Service.

K53 3.2.3 The charge of special call facilities shall be calculated on the basis used for an international call, applied to either:

K54 a) the landline charge only; or

K55 b) all components of the call charge.

K56 3.2.4 When the booking of a radiotelephone call that is liable to the payment of a special charge (for example, a collect call) is accompanied by a booking of a personal call, only one special charge shall be collected.

4 **Radiotelexogram**

K57 4.1 The international telex charge shall be the same as is applied in the international telex relation concerned.

K58 4.2 The land station charge may be the same charge as applied to Radiotelegrams except for charges related to special services as specified in K20 to K37, or may be fixed in terms of the unit of chargeable duration as converted on the basis of the number of words.

K59 4.3 The total charge for radiotelexograms should be collected from the sender except where other provisions are agreed.

5 **Radiomaritime telex letter**

K60 Each Administration shall take appropriate measures to collect charges for delivery

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DIVISION L

ACCOUNTING

1 General

L1 1.1 Charges for radiocommunications from ship to shore shall in principle, and subject to national law and practice, be collected from the maritime mobile station licensee:

L2 a) by the Administration that has issued the licence, or

L3 b) by a recognized private operating agency, or

L4 c) by any other entity or entities designated for this purpose by the Administration referred to in L2.

L5 1.2 The Administration or the recognized private operating agency or the designated entity (or entities) is referred to in this Recommendation as the *accounting authority* .

L6 1.3 Each accounting authority will be allocated a discrete identification code (see Annex A).

L7 1.4 The name(s) and address(es) of the accounting authority(ies) with their respective identification codes shall be notified to the ITU General Secretariat for inclusion in the *List of Ship Stations* [6]. The number of such accounting authorities responsible for mobile stations licensed by the Administration concerned shall be limited as far as possible and should not exceed 25.

L8 1.5 The licensing Administrations may authorize accounting authorities recognized by them to notify the ITU directly of additions, modifications and deletions to be made in the *List of Ship Stations* as regards ship stations for which they have accounting responsibility. Such additions, modifications and deletions should contain, whenever possible, the full details required for the List. Copies of any such notification to the ITU by an accounting authority may also be required by the licensing Administration in order to avoid duplication of notification to the ITU. When such authorization is given to accounting authorities , the licensing Administration shall notify the ITU of the granting of authority.

L9 1.6 For responsibility for payment of accounts rendered in accordance with L1 to L8, see L57 to L60.

2 Establishment of accounts

2.1 *Maritime accounts*

L10 2.1.1 In the case of radiocommunications originating in mobile stations, the land station Administration shall debit the accounting authority for the origin mobile station with:

L11 a) the land station charges;

L12 b) the landline charges;

L13 c) any charges for special services for telegrams;

L14 d) where appropriate, the special charges for radiotelephone calls with special facilities;

L15 e) where appropriate, postal charges on radiomaritime letters.

L16 2.1.2 The accounting for radiocommunications originating in mobile stations shall be based on accounting data gathered in the land station country, recording:

L17 a) the mobile station identification ;

L18 b) the accounting authority identification code , if applicable;

L19 c) the number of the addressee, including country and area codes;

L20 d) chargeable duration;

L21 e) start of the conversation time, if applicable;

L22 f) traffic category.

L23 g) type of call (automatic, operator-assisted, collect, etc.)

L24 2.1.3 In the case of radiocommunications, handled by manual or single-operator service, addressed to mobile stations and originating in a country other than that of the land station, the land station Administration shall, unless otherwise agreed as provided for in L37, debit the origin Administration with the land station charges.

L25 2.1.4 As regards automatic and semi-automatic radiocommunications, see L38 and L39.

L26 2.1.5 In the case of a radiotelegram that has been forwarded by the land station to a mobile station in port by means other than radio (see B53 of Recommendation F.110), only the land station charge shall be debited.

L27 2.1.6 In the case of radiocommunications exchanged between mobile stations:

L28 2.1.6.1 Through the medium of a single land station: the land station Administration debits the accounting authority for the origin mobile station with the appropriate charges.

L29 2.1.6.2 Through the medium of two land stations: the first land station Administration debits the accounting authority for the origin mobile station with the appropriate charges, taking into account L10 to L16. Thereafter, L24 to L26 are applied by the second land station, the first land station being regarded as the office of origin as far as the accounts are concerned.

L30 2.1.7 For accounting purposes, collect calls shall be regarded as originating in the destination country or mobile station and shall be identified as collect calls.

L31 2.1.8 Accounts are prepared monthly by the land station Administration and rendered by it to:

L32 a) the accounting authority responsible for the mobile station (see L10 to L15);

L33 b) the origin Administration (see L24) with the exception referred to in L37.

2.2 *International accounts*

L34 2.2.1 The international landline charges for radiotelegrams, radiotelephone calls and radiotelex calls shall be included in the international telegram, telephone and telex accounts respectively and shall be accounted for in accordance with the provisions of the *Telegraph Regulations* and *Telephone Regulations* [4], taking into account CCITT Recommendations. The agreed international accounting rates shall apply.

L35 2.2.2 The country on whose territory is established a land station serving as intermediary for the exchange of radiocommunications between a mobile station and another country, is considered, as far as the application of landline charges is concerned, as the origin or destination country and not as a transit country.

L36 2.2.3 Except as provided for in L38, land station charges shall, in principle, not be entered in the international telegram, telephone and telex accounts.

L37 2.2.4 However, by previous agreements, Administrations may establish a system by which the land station charges are included in the international accounts by the origin Administration.

L38 2.2.5 In the case of automatic or semi-automatic radiocommunications addressed to mobile stations and originating in a country other than that of the land station, the land station charges shall be included in the international telegram, telephone or telex accounts by the origin Administration on the basis of chargeable duration automatically recorded for automatic traffic, or by the operator of the international centre for semi-automatic traffic.

L39 2.2.6 The accounting for the charges relating to radiocommunications addressed to mobile stations, originating in the land station country and exchanged through a Maritime Mobile-Satellite System, shall be based on similar recordings as prescribed in L38.

L40 2.2.7 Accounts for charges relating to the maritime mobile-satellite services shall show the country of origin, destination ocean area and chargeable duration/words and if possible the number of calls/messages. Such accounts shall include the total chargeable duration for any broadcast calls separately listed, sent over the international public switched network to a coast earth station in the Maritime Mobile-Satellite Service.

L41 2.2.8 A specimen statement is given in Annexes D and E to this Recommendation.

2.3 *Accounting for single-operator service*

L42 2.3.1 Except as otherwise provided, the following provisions apply to single-operator radiotelephone and radiotelex services, in which land subscribers and land station operators of different countries call each other without the aid of an intermediate operator.

L43 2.3.2 The operating and charging procedures are described in Recommendation F.110.

L44 2.3.3 The billing and settlement procedures for single-operator radiomaritime calls to mobile stations are as follows:

L45 2.3.4 Except as provided for in L47, the call details are forwarded at least monthly to the Administration in question in the caller's country.

L46 2.3.5 The Administration charges the call in its internal billing system and includes the total amount in a quarterly statement of accounts to the credit of the land station Administration.

L47 2.3.6 In the case of collect radiotelephone calls to a mobile station in the international Maritime Mobile Service (if admitted by the land station Administration), the total amount of the bill shall be debited to the mobile station licensee in the maritime accounts (see L10 to L15), to the extent that such charges are to be paid by the mobile station.

L48 2.3.7 If bilaterally agreed between the Administrations concerned, the land station Administration may collect the charge by presenting a bill directly either to the foreign subscriber who booked the call or to his registered representative in the land station country.

3 Exchange and verification of maritime accounts

L49 3.1 Exchange and verification of accounts shall be carried out in accordance with the *Telegraph Regulations* and the *Telephone Regulations* [4], taking into account CCITT Recommendations.

The account may be rendered to either the accounting authority responsible for handling maritime accounts as designated by the licensing Administration or, with the prior approval of the licensing Administration, directly to another entity in the case of special arrangements agreed between the Administration and the mobile station licensee.

L50 3.2 The accounts, in duplicate, shall be sent as promptly as possible but in any case before the end of the third month following that to which they relate.

They should be sent by the most expeditious means and the covering invoice shall be identified by a unique number and show the date of dispatch.

L51 3.3 Radiotelegrams, radiotelephone calls and radiotelex calls shall be entered individually with all necessary particulars, in the monthly accounts that serve as a basis for the accounting mentioned in this division.

L52 3.4 Administrations shall always establish a separate statement for each mobile station (which shall include the name and the call sign) in such a way that the accounting authority can use the duplicate for accounting with the mobile station licensee.

L53 3.5 Exceptionally, where the volume of traffic for each mobile station is low, each sheet of the statement may contain data on more than one mobile station spaced in such a way that the statement can be divided and used for accounting with the mobile station licensee.

In either case, this statement should give the total charge for each mobile station and be covered by a single invoice.

L54 3.6 A specimen statement is given in Annexes B and C.

L55 3.7 In principle, an account shall be considered as accepted without the need for specific notification of acceptance to the Administration that sent it.

L56 3.8 As a matter of priority on receipt of the maritime account, the accounting authority should notify the Administration of preliminary rejections; i.e., the mobile stations contained within the maritime account that are not or are no longer their responsibility.

L57 3.9 However, any accounting authority shall have the right to question the contents of an account for a period of six months after dispatch of the account, even if the account has been paid. Adjustments which are later agreed shall be included in a subsequent account.

This provision has been modified by the CCITT Secretariat in accordance with the decision taken by the World Administrative Telegraph and Telephone Conference — Melbourne, 1988.

L58 3.10 All maritime accounts shall be paid by the accounting authority without delay and in any case within six months after dispatch of the account except where the settlement of accounts is undertaken in accordance with the *Telegraph Regulations* and the *Telephone Regulations* [4]. The unique invoice numbers and the traffic period(s) covered by the payment should be quoted at the time of payment.

L59 3.11 If international maritime accounts remain unpaid after six months, the Administration that has licensed the mobile station shall on request take all possible steps, within the limits of applicable national law, to ensure settlement of the accounts from the licensee.

L60 3.12 If the period between the date of dispatch and receipt exceeds 21 days, then the receiving accounting authority should at once notify the originating Administration that queries and payment may be delayed. However, the delay shall not exceed three months in respect of payment or five calendar months in respect of queries, even if the account has been paid, both periods commencing from the date of receipt of the account.

L61 3.13 The debtor accounting authority may refuse the settlement and adjustment of accounts presented more than 18 months after the date of handing-in of the radiotelegrams or the date of establishment of the radiotelephone calls or radiotelex calls to which the accounts relate.

4 Payment of balances

L62 4.1 Payment of balances shall be carried out in accordance with the *Telegraph Regulations* and the *Telephone Regulations* [4], taking into account CCITT Recommendations.

5 Archives

L63 5.1 The originals of radiotelegrams and documents relating to radiotelegrams, radiotelephone calls and radiotelex calls shall be held by the Administrations with all necessary precautions from the point of view of secrecy, until the settlement of the relative account and, in any case, for at least six months counting from the month in which the accounts were msent. Administrations may preserve the information by any other means, e.g. magnetic or electronic records.

L64 5.2 However, should an Administration deem it desirable to destroy the originals of radiotelegrams or any other documents or records mentioned in L63 before the above-mentioned period, and hence not be in a position to carry out an inquiry in respect of the services for which it is responsible, such Administration shall bear all the consequences both as regards refund of charges and any difference in the accounts in question that might otherwise have been observed.

6 Special accounting procedures for radiotelexograms

L65 6.1 Normal international accounting procedures should apply except as specified below:

L66 6.2 In the case of radiotelexograms originating in mobile stations, the land station Administration shall debit the accounting authority for the origin mobile station with:

L67 a) the land station charges;

L68 b) the international telex charges;

L69 c) any charges for special services.

L70 6.3 In the case of radiotelexograms addressed to mobile stations and originating in a country other than that of the land station, the land station's Administration shall debit the Administration of the country from which the radiotelegram originated with:

L71 a) the land station charges; and

L72 b) any charges for special services.

DIVISION M

REFUNDS

1 Radiotelegrams

1.1 *General*

M1 1.1.1 The provisions of Recommendation D.43 shall apply with the following exceptions.

M2 1.1.2 Where a radiotelegram remains undelivered after the required period of retention (Recommendation E.200/F.110, §§ B43, B44) the coast station Administration may determine the basis of the refund of charge either under the provisions of Recommendation D.43 or refund the coast station charges in full. In the second case the coast station Administration may charge a compensatory flat rate handling charge per undelivered message.

1.2 *Radiomaritime letters*

M3 1.2.1 When a radiomaritime letter fails to reach its destination due to the failure of the postal service, only the charges in respect to the services not carried out are refunded.

M4 1.2.2 Refund of charges is admitted when, through the fault of the telegraph or radiotelegraph service, a radiomaritime letter has not reached its destination, as well as in the cases provided for in Article 12 of the *Telegraph Regulations* [4] taking into account CCITT Recommendations.

2 Radiotelephone and radiotelex calls

M5 2.1 When, through any fault of the service, the booking of a call is not followed by the calling and called stations being placed in communication, no charge shall be payable. If the amount of the charge has been paid, it shall be refunded.

M6 2.2 In order to simplify operating and accounting procedures, Administrations may decide that no charge shall be payable when a requested connection has not been set up, whatever the reason.

M7 2.3 However, Administrations may decide to collect charges in cases where there is no fault of service. In that case the basis of charging shall be notified to the ITU General Secretariat for inclusion in the *List of Coast Stations* [5].

M8 2.4 When, through any fault of the service, difficulty is experienced in the course of a call, the chargeable duration of the call shall be reduced to the total time during which transmission conditions have been satisfactory, taking into account CCITT Recommendations.

3 Radiotelexograms

M9 3.1 Refunds for radiotelegrams and radio telex calls shall apply.

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Red´efinition des tabulateurs

+ tabulateurs des tableaux manuellement

Tableaux: 21 Tabulateur: 1

Spaces DISK 2 (tableaux) — NF08/002-005

1) Tableau Rec. D.90 — OPM: NF08/007, NF10/006

Formules

Texte

— DISK. 9 NF01/006   OPM 08

DIVISION D **AVEC CHAINE A3** DISK.11 NF01/006   OPM 14

8 ˝” NF01/006 OPM 14

1.4 ˝” NF01/006 OPM 14

Method of recording: DISK.12 NF01/009   OPM 15

Inter PLMN settlements: DISK 12 NF02/007   OPM 16

— DISK.12 NF02/012   OPM 16

Casos 2 y 3 DISK.12 NF02/009   OPM 16

Comment — DISK.12 NF02/013   OPM 16

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ANNEX A
(to Recommendation D.90)

Identification of accounting authorities

A.1 *Code format*

A.1.1 Each accounting authority will be allocated a discrete Accounting Authority Identification Code (AAIC) consisting of two parts as follows:

a) the first part will be two letters denoting the country in which the accounting authority is based, and must be in line with those given in the official service document published in accordance with Recommendation F.96 *(List of Indicators for the Telegram Retransmission System)* ; in case of doubt, information may be obtained from the ITU General Secretariat;

b) the second part will be numeric, denoting the particular accounting authority.

A.2 *Allocation*

A.2.1 The AAIC will be allocated by the Administration of the country in which the accounting authority is based, regardless of whether or not the accounting authority concerned is responsible for mobile stations licensed by that Administration.

In the case where the Administration recognizes that an accounting authority located outside its country is responsible for accounting of mobile stations licensed by that Administration, it shall notify the Administration of the country in which the accounting authority is based of the fact and request confirmation of the AAIC for that accounting authority.

A.2.2 This means that the limitation of accounting authorities to 25 refers only to the number of accounting authorities responsible for accounting for mobile stations licensed by that Administration and not necessarily to the number of accounting authorities based within the Administration’s country.

A.2.3 It may be possible therefore that the number of AAICs will exceed 25 for any one country but that there are still only 25 accounting authorities (not necessarily all based within that country) that are responsible for accounting for mobile stations licensed by that Administration.

Exceptionally, an Administration may accept that an individual ship station to be licensed by it, retain its existing accounting authority even if this is not one of those on the licensing Administration’s list *a)* — providing that the accounting authority is one of those recognized by the Administration of the country in which it is based as qualifying for lists *a)* and *b)* defined in paragraph A.4.3 below.

In this case, a prior agreement should be reached between the Administration concerned and accounting authority which continue to be responsible for the ship.

A.3 *Notification*

A.3.1 Having been allocated a code by the Administration of the country in which the accounting authority is based, the accounting authority will notify the Administration of each country that has recognized it as an accounting authority for mobile stations licensed by that Administration, of its AAIC. The Administration concerned should notify the ITU of the AAIC, whenever any notification is required by the ITU concerning the accounting authority; for example, when an Administration notifies the ITU of an accounting authority's address for inclusion in the *List of Ship Stations* [6], it should include the AAIC.

A.3.2 Each accounting authority is responsible for ensuring that all mobile stations for which it accounts are notified of its AAIC and that these mobile stations are aware of their responsibilities in using the AAIC when transmitting radio traffic.

A.3.3 When an accounting authority accepts responsibility for a mobile station, which may previously have been the responsibility of some other accounting authority, it must ensure that the mobile station is advised immediately of the new AAIC.

A.4 *Publication*

A.4.1 The Administration of the country in which the accounting authority is based is responsible for notifying the ITU of the AAIC allocated.

A.4.2 An Administration that accepts an accounting authority outside its own country, for its flag ships, is responsible for notifying the ITU of this fact and of the AAIC allocated to that accounting authority.

A.4.3 The information should be published in the ITU *List of Ship Stations* [6] as follows:

a) under the Administration's entry, the address of the accounting authorities authorized to account for mobile stations licensed by the Administration should be listed along with their AAIC;

b) each Administration will have another list showing all the accounting authorities based within that Administration with their AAICs.

List *a)* | should not exceed 25. List *b)* | may exceed 25.

There should also be an alphabetical list of *all* | accounting authorities giving their AAIC.

A.4.4 From these three lists it will be possible to extract the name and address of an accounting authority when only the AAIC is known, to find the AAIC when only the name and address are known and to determine which accounting authorities are authorized to account for mobile stations of a particular registry.

A.4.5 In the body of the ITU *List of Ship Stations* | [6] the AAIC of the accounting authority concerned should be shown in column 11 against each mobile station's entry.

A.5 *Examples*

A.5.1 *Allocation of accounting authority identification code (AAIC)*

TABLEAU [TA1.90], p.

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A.5.2 *List a)* **|** (according to § A.4.3)

TABLEAU [TA2.90], p.

A.5.3 *List b)* **|** (according to § A.4.3)

TABLEAU [TA3.90], p.

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TABLEAU [TB1.90], p.

TABLEAU [TC1.90], p.

TABLEAU [TD1.90], p.

TABLEAU [TE1.90], p.

References

[1] *Final Acts of the World Administrative Maritime Radio Conference* , ITU, Geneva, 1974.

[2] *Final Acts of the World Administrative Radio Conference (WARC)* , ITU, Geneva, 1979.

[3] *Radio Regulations* , ITU, Geneva, 1982.

[4] *Final Acts of the World Administrative Telegraph and Telephone Conference, Telegraph Regulations, Telephone Regulations* , ITU, Geneva, 1973. (See also the Preliminary Note No. 3, page XIV.)

[5] *List of Coast Stations* , (published every 2 years), ITU, Geneva.

[6] *List of Ship Stations* , 27th edition, ITU, Geneva, 1987.

[7] *List of Radiodetermination and Special Service Stations* , ITU, Geneva.

[8] *Final Acts of the WARC for the Mobile Services (MOB-83)* , ITU, Geneva, 1983.

Recommendation D.91

TRANSMISSION IN ENCODED FORM OF MARITIME TELECOMMUNICATIONS ACCOUNTING INFORMATION

(Melbourne, 1988)

1 Introduction

1.1 Under the provision of Recommendation D.90, Administrations engage in international accounting for radiocommunications handled each month.

1.2 A growing number of Administrations are processing this monthly international accounting data using computer based accounting systems. Information is drawn from traffic history tapes or manually encoded from data such as inward international accounts and statistical summaries prepared by manual abstraction from copies of traffic tickets.

1.3 It is usual at present to complete computer processing by producing conventional printed accounts following the specifications described in the various accounting Recommendations (D.90). Where the receiving Administration also uses computer facilities, however, this information has to be re-encoded for processing through its system.

1.4 Transmission of data in encoded form avoids the decoding/re-encoding step. It also offers a faster transfer of information than by printed forms through the mail. The latter remains true even if the forwarding Administration has prepared the data by manual/mechanical means.

2 Aim

2.1 The aim of this Recommendation is:

2.1.1 to enable Administrations using computer based accounting systems to transfer information to each other in encoded form, without the need for decoding into conventional printed form and subsequent encoding into machine-readable form;

2.1.2 to enable other Administrations, if they so desire, to benefit from the greater efficiency of speedier transfer of information to them and to prepare themselves for the introduction of computer working by introducing transmission of data in encoded form in advance of installation of a computer;

2.1.3 to facilitate provision of printed output from computer based systems in a format suitable for manual/mechanical processing where it is to be forwarded to Administrations not using computer facilities;

2.1.4 to facilitate provision of printed output from manual/mechanical accounting systems in a format suitable for data encoding where it is to be forwarded to Administrations employing computer processing.

3 Method

3.1 *Data record*

3.1.1 The aim of this Recommendation can be met by use of a standard data record format for the various elements of information to be transferred. The information elements and their sequence must be compatible with the provisions of the various accounting Recommendations so that decoding to and encoding from printed output for exchange of information with Administrations using manual/mechanical systems will be as simple as possible.

3.1.2 Between Administrations operating computer based accounting systems, adherence to the standard data record format for data transmission purposes will ensure that only one interface programme will be needed to enable any one computer installation to generate suitable input for, and accept output from, other computer installations.

3.2 *Data transfer*

3.2.1 Procedures already exist for transfer of data in conventional (printed) form through the mails. Data in encoded form could be transferred by mailing of magnetic or paper tapes, paper tape transmission by telex or data transmission over circuits utilized for this purpose.

3.2.2 While mailing of tapes avoids the encoding task for the receiving Administration there can be delays and loss in transit. In addition, there can be difficulties caused by the fragility of paper tape and incompatibility of various forms of magnetic tape recording.

3.2.3 Transfer of data via the telex service using paper tape transmission and reception can be advantageous for Administrations whether they have computer based accounting systems or manual/mechanical systems. As both page copy and punched paper tape can be generated at the receiving point, users of either type of accounting system can benefit. Page copy can be used for checking paper tape, with the latter becoming input to a computer. Page copy can also be used as the incoming international account avoiding the need for use of the postal service.

3.2.4 Where large volumes of data are to be exchanged, transmission over higher speed circuits offers significant benefits. Where suitable data links are in use for service transmissions, these could be utilized. Data terminals and modems capable of transmission speed in the range 600 to 2400 bits per second should be sufficient, but higher speeds could be used. For manual/mechanical systems, data received on data terminals can be reproduced as page copy representing an incoming international account. For computer based accounting systems, data transmission offers the possibility of complete automation of the process by computer-to-computer transfer.

4 Specific recommendations

4.1 It is recommended that:

4.1.1 where possible data transferred in printed form should be replaced by data transferred in encoded form;

4.1.2 for data transferred in encoded form, the standard data record format detailed in Annex A should be followed;

4.1.3 transmission of data in encoded form should be by the following means:

a) physical transfer of magnetic tapes (the standard file structure is given in Annex A);

b) use of data transmission over telephone circuits, dedicated circuits, telegraph circuits or special data links;

4.1.4 transmission methods (international packet switching service, electronic mailbox, etc.), operating practices and technical standards should be agreed between the Administrations concerned and should conform to the appropriate CCITT Recommendations.

ANNEX A
(to Recommendation D.91)

Monthly international accounting information

Fixed record formats

A.1 *File description*

A.1.1 The file has EBCDIC-format (Extended Binary Coded Decimal Interchange Code). The length of the formatted records is 130 characters, blocked by 10.

A.1.2 The tape, which will contain a header and a trailer record, may consist of several batches. For each accounting authority or country there may be a batch (or, if more than one currency is involved, one batch for each currency) for each of the following services:

— Satellite from-ship traffic,

— Terrestrial Radio from-ship traffic,

— Terrestrial Radio to-ship telephone and telegram traffic,

— Terrestrial Radio to-ship telex traffic,

— Credit card/reversed charge from-ship traffic for both services.

Each of the traffic batches will contain an accounting authority header record followed by the traffic items and ended by the summary record.

A.1.3 *Record description*

A.1.3.1 *Main header record*

Table [TA1.91], p.

A.1.3.2 *Record accounting authority*

Table [TA2.91], p.

A.1.3.3 *Record communication (traffic)*

Table [TA3.91], p.

A.1.3.4 *Summary record*

Table [TA4.91], p.

A.1.3.5 *Trailer record*

Table [TA5.91], p.

A.2 *Characteristics and structure of the tape*

A.2.1 *Physical structure of recording*

For recording, the ISO-Norm 1863 is to be used.

Method of recording: EBCDIC

Record density: 1600 BPI

Number of tracks: 9

Width of tape: 1/2 inch

Interblock gap: 0.6 inch

Block prefix: 3 inch

A.2.2 *Structure of tape*

Mono-tape, mono-file.

A.2.3 *Tape- and file-label*

Character code for label and EBCDIC code.

Volume header label: Vol. 1 (see Appendix III)

First file header label and end of file label: HDR1 and EOF 1 (see Appendix IV)

Second file header label and end of file label: HDR2 and EOF 2 (see Appendix V)

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Tableau 6 [T6.91], p.

Tableau 7 [T7.91], p.

Tableau 8 [T8.91], p.

Tableau 9 [T9.91], p.

Tableau 10 [TA10.91], p.

Recommendation D.93

CHARGING AND ACCOUNTING IN THE INTERNATIONAL LAND MOBILE TELEPHONE SERVICE

(PROVIDED VIA CELLULAR RADIO SYSTEMS)

(Melbourne, 1988)

1 General considerations

1.1 In the land mobile telephony service, the Home Public Land Mobile Network (HPLMN) will know the location of all operational mobile stations for which it is the home registered network, when the station is operating within its HPLMN or has roamed in accordance with the principles contained in CCITT Recommendations of the Q.1000 series.

1.2 The Visited Public Land Mobile Network (VPLMN) will be able to access and record the necessary details of any mobile station which has roamed and registered with it, such that it can forward all necessary billing information to the HPLMN.

1.3 Mobile stations will only be able to roam to another Public Land Mobile Network (PLMN):

— upon the conclusion of a bilateral agreement between PLMNs,

— upon the granting by the HPLMN of the option to roam to the mobile station.

1.4 As part of the bilateral agreement, the HPLMN should undertake to pay the VPLMN the charges incurred by the HPLMN registered mobile subscribers.

1.5 Examples of the application of the charging and accounting principles, set out below, for various call routing scenarios are given in Annex A.

2 Principles for charging

2.1 The charge structure and level in any country is a national matter.

2.2 *HPLMN charging*

2.2.1 The HPLMN is responsible for billing the mobile subscriber for all incurred charges.

2.2.2 Charging structures should be as simple as possible.

2.2.3 The charge would normally consist of two components:

— a network access component;

— a network utilization component.

2.2.3.1 The network access component is intended to cover the cost of making the service available, such costs being independent of network utilization:

— initial registration charge (non-recurring),

— subscription or rental (periodic).

The network access component shall not be included in the international accounts.

2.2.3.2 The network utilization component is intended to cover the costs of the service which are dependent on network utilization:

— utilization charges (covering mobile, national/international elements as applicable),

— any supplementary service charges.

2.2.4 The charges billed to the mobile subscriber should be such as to cover the payments due to the VPLMN plus any handling charges which may also be raised.

2.3 *VPLMN charging*

2.3.1 The charges raised by a VPLMN against the HPLMN should normally include one or more of the following:

— roaming registration fee (non-recurring)

— roaming subscription (periodic),

— utilization charges (covering mobile, national/international elements as applicable),

— any supplementary service charges.

2.4 *Fixed station charges*

2.4.1 In the case of a fixed station to mobile station international call, the appropriate fixed station to fixed station telephone charge should apply to the calling station.

2.4.2 In the case of a fixed station to mobile station call, the fixed station should always be charged for the call dialled, irrespective of whether the mobile station has or has not roamed; if a mobile station has roamed, a charge for the forwarded element of the call may be raised by the HPLMN against the mobile station.

2.5 *Mobile station to mobile station charges*

2.5.1 In the case of a mobile station to mobile station international call, the appropriate mobile station to fixed station charge should apply to the calling station.

2.5.2 In the case of a mobile station to mobile station call, where the calling mobile station has not roamed, the calling station should always be charged for the call dialled, irrespective of whether the called mobile has or has not roamed. If a mobile station has roamed a charge for the forwarded element of the call may be raised by the HPLMN of the called mobile station. The case where the calling mobile station has roamed is covered by § 2.3.1 above.

3 Principles for accounting

3.1 International traffic originating or terminating at a mobile station will always be routed via the fixed networks of the countries concerned. The Administration of the country where the call originates should therefore include all such traffic in its regular international accounting statements at the normal accounting rates.

3.2 The use of the PLMN in either country should not form part of the international traffic accounts, being covered under the charging aspects.

4 Principles for settlements between PLMNs

4.1 The VPLMN should prepare a statement of the charges payable by the HPLMN for its registered mobile subscribers. The format and frequency of dispatch should be agreed between the two parties. This statement should show the total charge expressed in SDRs or another agreed accounting currency, together with the conversion rate.

4.2 To ensure that the HPLMN has sufficient information for billing purposes, individual statements should be prepared for each registered subscriber. These statements should include the following information:

a) The period covered by the statement

b) The subscriber identity in the HPLMN

c) For each call:

i) the date and start time,

ii) number called and area code,

iii) destination country,

iv duration in minutes and seconds,

v) any supplementary services used.

4.3 In the absence of alternative settlement procedures agreed between the PLMNs concerned, settlement of balances shall be effected in accordance with the provisions of the Administrative Regulations [1].

ANNEX A

(to Recommendation D.93)

Applications of charging and accounting principles

for various call routing scenarios

A.1 *Case 1 — Mobile station to a fixed station*

In this case the mobile station A* is in its home PLMN (country A), makes an international (non-roaming) call to a fixed station B‘ in country B (see Figure A-1/D.93).

Figure A-1/D.93, p.

Charging: A* will be billed by its HPLMN for call to country B.

Inter PLMN settlement: Not applicable.

Traffic accounting: The call from A to B is included in A’s outgoing traffic account.

A.2 *Case 2 — Roamed mobile station to a fixed station*

Mobile station A* has roamed to PLMN in country B and makes a national call to a fixed station (see Figure A-2/D.93).

Figure A-2/D.93, p.

Charging: A* will be billed by its HPLMN based on data provided by the VPLMN.

Inter PLMN settlement: The HPLMN ‘‘A’’ will reimburse the VPLMN ‘‘B’’ for the charges incurred by the roamer.

Traffic accounting: Not applicable.

A.3 *Case 3 — Roamed mobile station to fixed station*

Mobile station A* has roamed to a PLMN in country B and makes an international call.

A.3.1 *Case 3A — Call to the home country* (see Figure A-3/D.93)

Figure A-3/D.93, p.

Charging: As for Case 2: A* will be billed by its HPLMN based on data provided by the VPLMN.

Inter PLMN settlement: As for Case 2: the HPLMN ‘‘A’’ will reimburse the VPLMN ‘‘B’’ for the charges incurred by the roamer.

Traffic accounting: The call from B to A is included in the normal international telephone traffic account of B.

A.3.2 *Case 3B — Call to a third country, C* (see Figure A-4/D.93)

Figure A-4/D.93, p.

Charging: As for Case 2: A* will be billed by its HPLMN based on data provided by the VPLMN.

Inter PLMN settlement: As for Case 2: the HPLMN ‘‘A’’ will reimburse the VPLMN ‘‘B’’ for the charges incurred by the roamer.

Traffic accounting: The call from B to C is included in the normal telephone traffic account of B.

A.4 *Case 4 — Fixed station to mobile station*

Fixed station A‘ makes an international call to mobile station B* in country B (home PLMN) (see Figure A-5/D.93).

Figure A-5/D.93, p.

Charging: Appropriate fixed station to fixed station international telephone charges apply.

Inter PLMN settlement: Not applicable.

Traffic accounting: The call from A to B is included in A‘’s outgoing traffic account.

A.5 *Case 5 — Fixed station to roamed mobile station*

Fixed station A‘ calls mobile station A* which has roamed to country B.

A.5.1 *Case 5A* — A‘ is provided with a recorded announcement saying A* is not available on this PLMN, call is not forwarded (see Figure A-6/D.93).

Figure A-6/D.93, p.

Charging: The fixed station may be charged for accessing the recorded announcement.

Inter PLMN settlement: Not applicable.

Traffic accounting: Not applicable.

A.5.2 *Case 5B* — The call is automatically forwarded to the mobile network in country B. A‘ is not made aware (see Figure A-7/D.93).

Figure A-7/D.93, p.

Charging: — Fixed station is charged for the national call dialled.

— The HPLMN ‘‘A’’ may raise a charge against A* for the forwarded element of the call.

— A* may be billed by its HPLMN for charges which may be raised by the VPLMN for the roamer’s use of its network to receive the call, based on the data provided by the VPLMN ‘‘B’’.

Inter PLMN settlement: As for Case 2: the HPLMN ‘‘A’’ will reimburse the VPLMN ‘‘B’’ for the charges incurred by the roamer.

Traffic accounting: The call from A to B is included in A’s outgoing traffic account.

A.5.3 *Case 5C* — Fixed station advised that the mobile station has roamed and given option of completing call at appropriate charge or cancelling (see Figure A-8/D.93).

Figure A-8/D.93, p.

Comment — Not yet technically possible — for further study.

A.5.4 *Case 5D* — Fixed station knows the roamer's temporary number in VPLMN (see Figure-A-9/D.93).

Figure A-9/D.93, p.

Charging: — As for case 4: appropriate fixed station to fixed station international telephone charges apply.

— A* may be billed by its HPLMN for charges which may be raised by the VPLMN ''B'' for the roamer's use of its network to receive the call, based on the data provided by the VPLMN.

Inter PLMN settlement: As for case 2: the HPLMN ''A'' will reimburse the VPLMN ''B'' for the charges incurred by the roamer.

Traffic accounting: As for case 4: the call from A to B is included in A's outgoing traffic account.

A.6 *Case 6 — Fixed station to roamed mobile station*

Fixed station B‘ makes an international call to mobile A* in country A which has roamed to country B. B‘ is not made aware.

A.6.1 *Case 6A — Call is automatically forwarded to country B* (see Figure A-10/D.93)

Figure A-10/D.93, p.

Charging: — As for case 5B: fixed station is charged for the international call dialled.

— The HPLMN may raise a charge against A* for the forwarded element of the call.

— A* may be billed by its HPLMN for charges which may be raised by the VPLMN ''B'' for the roamer's use of its network to receive the call, based on the data provided by the VPLMN.

Inter PLMN settlement: As for case 2: the HPLMN ''A'' will reimburse the VPLMN ''B'' for the charges incurred by the roamer.

Traffic accounting: — The call from B to A is included in B's outgoing traffic account.

— The call from A to B is included in A's outgoing traffic account.

A.6.2 Case 6B — Fixed station B‘ knows roamed station A*’s temporary number in country B (see Figure A-11/D.93)

Figure A-11/D.93, p.

Charging: — As for case 4: appropriate national telephone charges apply.

— A* may be billed by its HPLMN for charges which may be raised by the VPLMN ‘‘B’’ for the roamer’s use of its network to receive the call, based on the data provided by the VPLMN.

Inter PLMN settlement: As for case 2: the HPLMN ‘‘A’’ will reimburse the VPLMN ‘‘B’’ for the charges incurred by the roamer.

Traffic accounting: Not applicable.

A.6.3 *Case 6C* — Using Signalling System No. 7, the mobile switching centre in country A signals to the national network (NN) in B that A* is now in country B and the call is automatically forwarded via the mobile switching centre in country B (see Figure A-12/D.93).

Figure A-12/D.93, p.

Comment — Not yet technically possible — for further study.

A.7 *Case 7 — Fixed station to roamed mobile station*

Fixed station A‘ calls mobile station B* which has roamed to country C. A‘ is not aware.

A.7.1 *Case 7A* — Call is automatically forwarded to country C (see Figure A-13/D.93).

Figure A-13/D.93, p.

Charging: — As for case 6A: fixed station is charged for the international call dialled.

— HPLMN ‘‘B’’ may raise a charge against B* for the forwarded element of the call.

— B* may be billed by its HPLMN for charges which may be raised by the VPLMN for the roamer’s use of its network to receive the call, based on the data provided by the VPLMN.

Inter PLMN settlement: as for case 2: The HPLMN ‘‘B’’ will reimburse the VPLMN ‘‘C’’ for the charges incurred by the roamer.

Traffic accounting: — The call from A to B is included in A’s outgoing traffic account.

— The call from B to C is included in B’s outgoing traffic account.

A.7.2 *Case 7B* — Using C7, the MSC/NN in country B signals to NN that B* is now in country C. Call is automatically forwarded to PLMN in country C (see Figure A-14/D.93).

Figure A-14/D.93, p.

Comment — Not yet technically possible — for further study.

A.8 *Case 8 — Mobile station to mobile station*

In this case the mobile station A* is in its HPLMN and makes an international (non-roaming) call to mobile station B* its home PLMN (see Figure A-15/D.93).

Figure A-15/D.93, p.

Charging: A* will be billed by its HPLMN for call to country B.

Inter PLMN settlement: Not applicable.

Traffic accounting: The call from A to B is included in A's outgoing traffic account.

A.9 *Case 9 — Mobile station to roamed mobile station*

In this case mobile station A* is in its HPLMN and makes a call to mobile station B* which has roamed to country C (see Figure A-16/D.93).

Figure A-16/D.93, p.

Charging: — Mobile station A* is charged for the international call dialled.

— B*'s HPLMN may raise a charge for the forwarded element of the call.

— B* may be billed by its HPLMN for charges which may be raised by the VPLMN ''C'' for the roamer's use of its network to receive the call, based on the data provided by the VPLMN.

Inter PLMN settlement: The HPLMN ''B'' will reimburse the VPLMN ''C'' for the charges incurred by the roamer.

Traffic accounting: — The call from A to B is included in A's outgoing traffic account.

— The call from B to C is included in B's outgoing traffic account.

A.10 *Case 10 — Roamed mobile station to mobile station*

In this case roamed mobile station A* has roamed to a PLMN in country B and makes an international call to mobile C* operating in its HPLMN (see Figure A-17/D.93).

Figure A-17/D.93, p.

Charging: A* will be billed by its HPLMN based on data provided by the VPLMN.

Inter PLMN settlement: The HPLMN ‘‘A’’ will reimburse the VPLMN ‘‘B’’ for the charges incurred by the roamer.

Traffic accounting: The call from B to C is included in the normal international telephone traffic account of B.

A.11 *Case 11 — Roamed mobile station to roamed mobile station*

In this case roamed mobile station A* makes an international call to roamed mobile station C* operating in country D (see Figure A-18/D.93).

Figure A-18/D.93, p.

Charging: A* will be billed by the HPLMN based on data provided by the VPLMN.

Inter PLMN settlement: — For A*, its HPLMN will reimburse the VPLMN ‘‘B’’ for charges incurred by A*s roaming in country B.

— For C*, its HPLMN may raise a charge for the forwarded element of the call.

— C* may be billed by its HPLMN for the charges which may be raised by the VPLMN ‘‘D’’ for the roamer’s use of its network to receive the call, based on the data provided by the VPLMN.

Traffic accounting: — The call from B to C is included in B’s outgoing traffic account.

— The call from C to D is included in C’s outgoing traffic account.

Reference

[1] *Final Acts of the World Administrative Telegraph and Telephone Conference, Telegraph Regulations, Telephone Regulations* , ITU, Geneva, 1973. (See also the Preliminary Note No. 3, page XIV.)