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CHARGING AND ACCOUNTING IN INTERNATIONAL TELECOMMUNICATION SERVICES

INTERNATIONAL SOUND- AND TELEVISION-PROGRAMME TRANSMISSIONS

OCCASIONAL PROVISION OF CIRCUITS FOR INTERNATIONAL SOUND- AND TELEVISION-PROGRAMME TRANSMISSIONS

ITU-T Recommendation D.180

(Previously "CCITT Recommendation")

FOREWORD

The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the International Telecommunication Union. The ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Conference (WTSC), which meets every four years, established the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

ITU-T Recommendation D.180 was revised by the ITU-T Study Group III (1988-1993) and was approved by the WTSC (Helsinki, March 1-12, 1993).

NOTES

1 As a consequence of a reform process within the International Telecommunication Union (ITU), the CCITT ceased to exist as of 28 February 1993. In its place, the ITU Telecommunication Standardization Sector (ITU-T) was created as of 1 March 1993. Similarly, in this reform process, the CCIR and the IFRB have been replaced by the Radiocommunication Sector.

In order not to delay publication of this Recommendation, no change has been made in the text to references containing the acronyms "CCITT, CCIR or IFRB" or their associated entities such as Plenary Assembly, Secretariat, etc. Future editions of this Recommendation will contain the proper terminology related to the new ITU structure.

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

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OCCASIONAL PROVISION OF CIRCUITS FOR INTERNATIONAL SOUND- AND TELEVISION-PROGRAMME TRANSMISSIONS

(Melbourne, 1988; amended at Helsinki, 1993)

1 General

In most cases, circuits used for sound- and television-programme transmissions are owned by Administrations although in some countries national broadcasting organizations own all or part of the circuits within national boundaries.

The provision of circuits for transmissions between two or more countries requires the closest cooperation between:

- the broadcasting organizations[1)] concerned in a sound- or television-programme transmission, either as users or owners of sound-programme and television circuits or both, and
- the Administrations concerned.

It is therefore recommended that the following principles for ordering and charging should be observed for the occasional provision of sound or television circuits.

This Recommendation is intended to cover the provision of circuits for sound- and television-programme transmissions only and not other types of transmissions.

This Recommendation does not include provisions for the leasing for periods of one day or more of sound- and television-programme circuits, which are subject to the provisions of Recommendation D.4 and Recommendation D.310 R.

Provisions governing the technical aspects and maintenance of sound and television programmes and associated circuits are contained in the J, M and N Series Recommendations.

2 Definitions

The terms used in connection with sound- and television-programme transmissions, as defined below, apply to all cases of the occasional provision of sound or television circuits.

2.1 programme booking centre (PBC)

F: service centralisateur

S: centro de reserva de programas (PBC)

The office of an Administration (or broadcasting organization where circuits are provided for international service by such an organization) which receives orders for international sound and/or television circuits from broadcasting organizations in its own country or from a broadcasting organization in another country or from the PBC of another Administration and is charged with the task of making appropriate arrangements for providing the ordered circuits.

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1) Any reference to broadcasting organizations in this Recommendation applies equally to other users.

2.2 international sound programme centre (ISPC)

F: centre radiophonique international (ISPC)

S: centro radiofónico internacional (ISPC)

A centre at which at least one international sound-programme circuit terminates and in which international sound-programme connections can be made by the interconnection of international and/or national sound-programme circuits.

The ISPC is responsible for setting up, lining up and maintaining international sound-programme connections and for the supervision of the transmissions made on them.

2.3 international television programme centre (ITPC)

F: centre télévisuel international (ITPC)

S: centro internacional de televisión (ITPC)

A centre at which at least one international television circuit terminates and in which international television connections can be made by the interconnection of international and/or national television circuits.

The ITPC is responsible for setting up, lining up and maintaining international television connections and for the supervision of the transmissions made on them.

The centre at the end of an international satellite television circuit is sometimes referred to as the satellite international television-programme centre (SITPC).

2.4 broadcasting organization

F: organisme de radiodiffusion

S: organismo de radiodifusión

A broadcasting organization is an organization which is concerned with sound and/or television broadcasting.

Most of the customers ordering facilities for sound- and television-programme transmissions are broadcasting organizations, and for convenience, the term "broadcasting organization" is used in this Recommendation to denote activity of any user or customer, and where so used, is equally applicable to any other customer requiring sound- or television-programme circuits.

2.5 Categories of transmissions

2.5.1 **regular transmissions** are those which take place at regular intervals, at fixed times between the same points. Some regular transmissions may be subject to special contractual arrangements.

2.5.2 **occasional transmissions** are all those which do not fall within the definition of regular transmissions.

Some occasional transmissions may be subject to special contractual arrangements.

2.5.3 **simple transmissions** are one-way transmissions from a point of origin in one country to a receiving point in another.

2.5.4 **multiple-destination transmissions** are those transmissions which originate in one or more countries, from one or more points of origin, and are transmitted simultaneously to two or more countries.

2.6 Categories of circuit

2.6.1 **sound-programme circuit** is a unidirectional circuit for the transmission of a sound programme or a sound component of a television programme[2)]. The various types of audio circuits are described in clause 3.

2.6.2 **television circuit** is a unidirectional circuit for the transmission of the video component of a television programme.

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2) More than one such sound-programme circuit may be required for association with a single television circuit.

2.6.3 **control circuit** is a telephone-type circuit which may be used by a broadcasting organization for the supervision and/or coordination of a sound- or television-programme transmission.[3)]

2.7 Constitution of sound- and television-programme connections

2.7.1 An international sound- or television-programme connection consists of one or more unidirectional circuits between broadcasting organizations and comprises:

a) the point to be regarded as that of the origin of the transmission (Point A of Figures 1 and 2);

b) the outgoing national circuit which connects Point A to the first ISPC or ITPC (Point B);

c) an international circuit comprised of any combination of international or national terrestrial, submarine cable, radio or satellite circuits or circuit sections. (A satellite circuit consists of a satellite section, including the earth stations, extended by terrestrial means to the ISPCs or ITPCs at the ends of the satellite circuit);

d) the incoming national circuit which connects the last ISPC or ITPC (Point C) to Point D;

e) the point of destination of the transmission (Point D).

The various parts of international connections are illustrated in Figures 1 and 2.

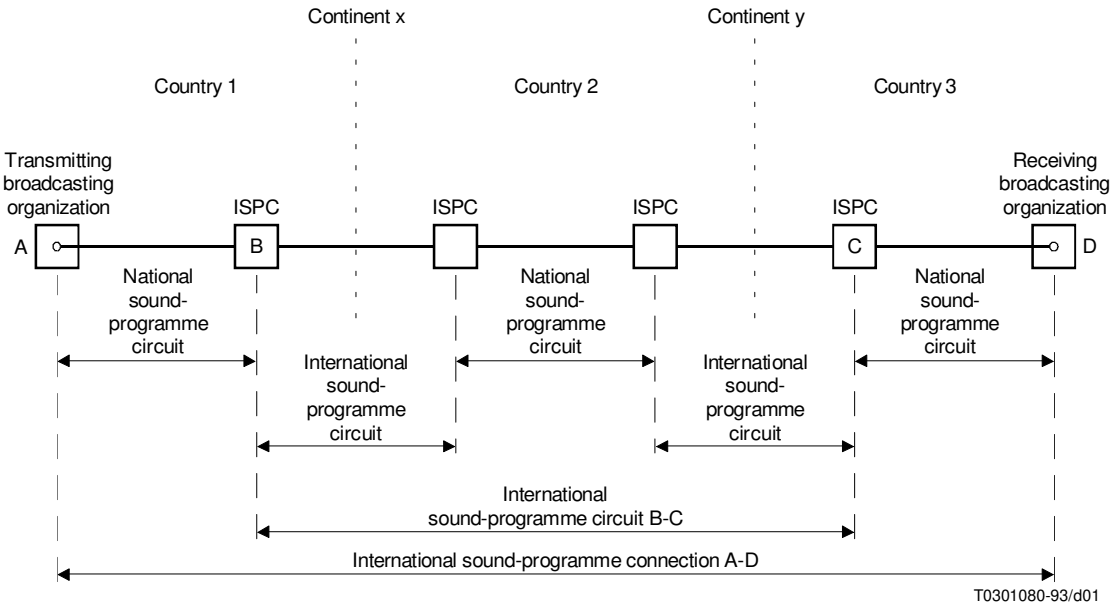

FIGURE 1/D.180

Example of an international sound-programme connection

2.7.2 The complete chain between A and D, including the international circuit B-C and the national circuits (A-B and C-D) is the *international sound- or television-programme connection*.

2.7.3 Points A and D are, as a general rule, under the control of the transmitting and receiving broadcasting organizations.

Points B and C are, in principle, under the control of the Administrations of the corresponding countries.

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3) More than one such control circuit may be required for association with a single television circuit.

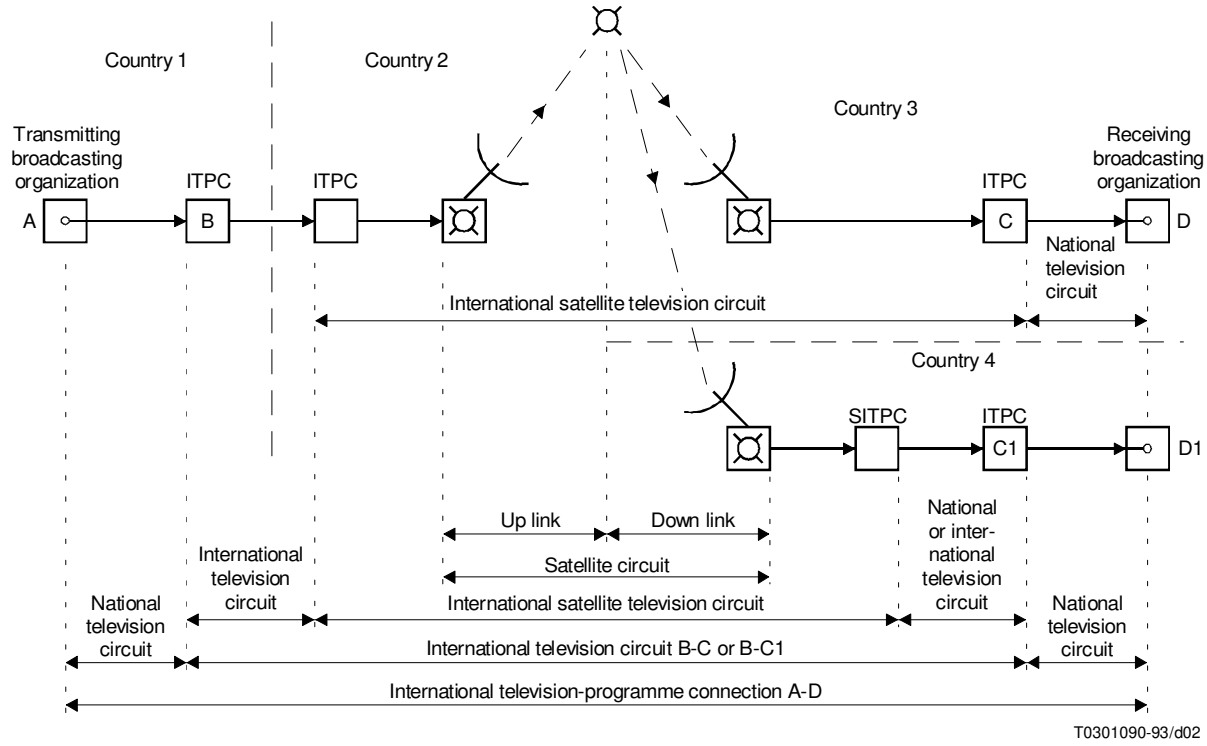

FIGURE 2/D.180

Example of an international television-programme connection involving a satellite circuit

The circuit B-C is generally under the control of the Administrations but certain of its component parts (which may be national or international circuits) and some ISPCs and ITPCs may be owned or operated by broadcasting organizations.

The national circuits A-B and C-D may be under the control of either an Administration or a broadcasting organization, or both jointly, according to the actual arrangements in the countries concerned.

3 Types of sound-programme circuits

3.1 The types of sound-programme circuits that may be provided for sound-programme transmissions or the sound component of a television-programme transmission are referred to as follows for ordering and charging purposes:

	Approximate bandwidth
Narrow-band	3 kHz
Medium-band	5 kHz
Wide-band	10 kHz
Very wide-band	15 kHz
Stereophonic pair	2 at 15 kHz each

Detailed technical parameters of some types are given in the J and N Series Recommendations.

A stereophonic pair consists normally of two very wide-band circuits, which must be carefully matched. Each circuit of a stereophonic pair may also be used separately for monophonic transmissions.

3.2 Narrow-band sound-programme circuits may be telephone-type circuits. They are provided in varying forms, but are routed through the ISPC for setting-up and maintenance. When provided on a 4-wire basis, the return path may be used as an unidirectional control circuit.

3.3 The five types of circuit in 3.1 above provide for the continued use of existing facilities (e.g. circuits with a top nominal transmitted frequency of 6.4 kHz, both "old" and "new" types, would be medium-band circuits as well as those with a top nominal frequency of 5 kHz) as well as future requirements, and apply equally:

– for both sound- and television-programme transmissions; and

– for terrestrial, submarine cable, radio and satellite circuits.

3.4 Administrations may decide to provide of the five types of sound circuits, only those for which sufficient customer demand is indicated.

3.5 When an Administration cannot provide the type of circuit that is ordered, if time permits, it will inform the broadcasting organization of the type of circuit that can be made available. When time does not permit consultation with the broadcasting organization, the Administration should provide a circuit of the nearest suitable type available.

4 Ordering of circuits and conditions of acceptance

4.1 Orders

4.1.1 Orders for the use of circuits for sound- and television-programme transmissions should normally be addressed by a broadcasting organization to the Administration of its country. The broadcasting organizations concerned should coordinate their arrangements before placing orders for circuits. Orders for all the circuits to be established and, wherever possible in practice, for any automatic telephone set required, should usually be placed by the broadcasting organization which is to receive the transmission.

4.1.2 With prior agreement of the broadcasting organizations concerned, and particularly for some multiple-destination transmissions, orders may be placed with the Administration of the country in which the transmission will originate or of any intermediate transit country.

4.1.3 Coordinated Universal Time (UTC)[4)] should be used for bookings.

4.1.4 When agreement has been reached on the orders to be placed, the transmitting broadcasting organization should provide its Administration with a list, for information purposes, of all the circuits to be established.

Provision of this list does not constitute an order for circuits. In addition, if the broadcasting organizations concerned have appointed a coordinating centre for a transmission, it should send a list of all circuits to be established to the Administration concerned (see Recommendation N.52 [1]).

4.1.5 Each order, which should be clearly identified as such, carries with it an undertaking to pay all the charges relating to the use of the facilities ordered, including any cancellation fee or special expenses which may be incurred in connection with the order.

If time permits after an order has been placed, an estimate of any special expenses which are likely to be a major part of the total should be given to the broadcasting organization.

4.1.6 Orders for the use of circuits will be met subject to availability of facilities. The ςProgramme Booking Centre (PBC) receiving orders should confirm acceptance and availability of circuit as soon as possible unless special arrangements have been made nationally between the Administration and the broadcasting organization which has placed the order. When time permits, orders and confirmations should normally be in written form (e.g. telex).

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4) For operational purposes, Coordinated Universal Time can be considered equivalent to Greenwich Mean Time (GMT).

4.1.7 It is in the interest of both broadcasting organizations and Administrations that orders should be placed as soon as possible, preferably at least 24 hours before the provision of circuits is scheduled to take place. Administrations should always do their best to provide circuits at shorter notice. Broadcasting organizations should always do their best to place orders as early as possible, particularly in those cases where special construction of facilities will be required.

4.2 Handling of orders received by Administrations

4.2.1 The Administration receiving an order is responsible for passing the order to all other Administrations concerned and for obtaining from them confirmation of the availability of the circuits and facilities required.

4.2.2 Facilities for sound- and television-programme transmissions should be allocated in the sequence in which orders are received.

4.2.3 For the provision of television circuits via satellite:

a) the Administration receiving the order is responsible for arranging the circuits between the broadcasting organization and the appropriate ITPC at the end of the satellite circuit (SITPC);

b) the Administration operating this ITPC is responsible for confirming the availability of the satellite circuit and for ordering its portion of that circuit; and

c) the Administration operating the ITPC at the other end of the satellite circuit is responsible for ordering its portion of the satellite circuit and for arranging the circuits between its ITPC and the other broadcasting organization.

This procedure normally applies also to sound-programme and control circuits provided by means of satellite channels specially assigned for use in association with television transmissions but not necessarily to other sound-programme circuits provided via the satellite or to sound-programme circuits provided by any other means, e.g. submarine cable.

4.3 Cancellations

4.3.1 A cancellation fee may be charged by Administrations if, for reasons not within their control, the order is cancelled:

a) less than 24 hours, but more than 2 hours, before the time scheduled for the beginning of the provision of circuits (see 4.3.2 below); or

b) 2 hours or less before the time scheduled for the beginning of the provision of circuits (see 4.3.3 below).

The time to be considered in determining these limits is the time at which the broadcasting organization submits its cancellation request to the PBC which received the original order.

4.3.2 The fee with regard to 4.3.1 a) should be such as to cover the administrative expenses already incurred by Administrations following receipt of the order. This should provide some incentive to broadcasting organizations to cancel orders in sufficient time for the circuits concerned to be made available to another customer. This fee should not be charged unless the order has been accepted and confirmed by the Administration concerned.

4.3.3 The fee with regard to 4.3.1 b) should be such as to cover, in addition to the expenses referred to in 4.3.2, any additional preparation for the provision of circuits, and to compensate in part for loss of revenue which might have been obtained by making the circuit available to another customer. This fee may be charged whether or not the order has been confirmed by the Administration concerned.

4.3.4 In all cases, Administrations may require reimbursement of any documented special expenses incurred, e.g. in the provision of specially engineered circuits, even when the transmission is cancelled with more than 24 hours notice.

4.4 Alterations in orders

An alteration to an order for which the Administrations are not responsible should be considered as a new order which cancels the original one. The original order is therefore subject to the cancellation fee referred to in 4.3 above when the alteration request is made within the specified time limit, except that no fee is payable in respect of:

a) a change of less than a total of 2 hours in the time scheduled for the beginning of the use of the circuit, regardless of the number of individual alterations;

b) a change in the scheduled time such that the new period of use overlaps the original period;

c) a change in the overall duration of the use of circuits;

d) a change in the routing of circuits beyond the extremities of the international circuit provided that no alteration whatsoever is requested in the international circuit.

5 Charging principles

The total charge for the provision of circuits for an international sound- or television-programme transmission is the sum of the charges for the various circuit sections (see 2.7 above and Figures 1 and 2).

The international charges should normally have two basic elements:

1) a fixed charge designed to cover preparation and operation, and

2) a charge based on duration of the provision of the circuit.

The fixed charge may include a minimum duration of the provision of the circuit.

In view of the great disparity in the cost of the various components of, on the one hand, terrestrial circuits of the type used mainly within continents and, on the other hand, satellite and long-distance submarine cable circuits used mainly for intercontinental relations, it is not possible to recommend one single method for developing the charges for each individual section.

Administrations which of necessity operate using more than one method of charging should define the interconnection points for the application of the different methods. This should normally be an ISPC or an ITPC.

Whenever possible the same method of charging should be used within the same region.

5.1 Charging for the provision of circuits for international sound- and television-programme transmissions except those via satellite, radio or intercontinental submarine cable circuits

5.1.1 The charge normally should be made up of the following elements:

a) a fixed charge for the preparation and operation per provision of circuits and per country having an interconnection point (whatever the number of interconnecting points within the terminal and transit countries);

b) a charge per minute of provision of circuits per terminal country, which may be expressed differently for:

– a sending terminal,

– a receiving terminal,

– a branching terminal in a multiple-destination transmission;

c) a charge per minute of provision of circuits and per interconnection point in a transit country;

d) a charge per minute of provision of circuits based on the length of line;

e) any special expenses incurred in the setting up of special circuits to connect with existing circuits and, wherever possible in practice, for the installation of any automatic telephone set required, any special charges for use of national facilities not covered by the charges of a) and d) above.

5.1.2 The provision of a sound-programme circuit established on a subcarrier of a channel used for television transmission is charged as for a sound circuit provided for an independent sound-programme transmission.

When a Sound-In-Sync (SIS) facility is used, no additional amount is added to the accounting rates. Any remuneration for extra expenses incurred by an Administration is a national matter between that Administration and its broadcasting organization.

5.1.3 In principle, use of different types of sound-programme circuits to make up an international sound-programme connection should be avoided. However, if it is necessary to use different types of circuits for any section of the connection, the charge applicable to all sections would be that for the lowest quality type used. The sharing of charges between Administrations should be on the basis of the lowest charges applied.

If a broadcasting organization orders a higher quality sound-programme circuit for a particular section of the connection, the charges for that higher quality type would apply to that section.

5.1.4 If a telephone-type circuit is provided for use as a sound-programme circuit, items b), c) and d) in 5.1.1 above may be combined in a charge related to the charge for an appropriate telephone call in the relation concerned.

NOTE – This does not obviate the need to pay the charges of 5.1.1 a) and 5.1.1 e) as appropriate.

When a narrow-band circuit provided on a 4-wire basis is used as a sound-programme circuit in one direction and as a control circuit in the other direction (see 3.2 above) an additional charge may be made.

5.1.5 International circuits which are part of a network providing multiple-destination transmissions, where the programme is received simultaneously in several countries, are considered, from the charging point of view, as separate circuits:

- from the point of origin to the first receiving terminal;
- from the first receiving terminal to the next receiving terminal, and so on;
- from a branching point to the next receiving terminal.

5.1.6 Broadcasting organizations should arrange among themselves which will pay charges for the common use of circuits in multiple-destination transmissions. The diagram in Figure 3 illustrates how such arrangements and the principles in 5.1.5 above should be applied.

In Figure 3, it is assumed that the broadcasting organization in B, which broadcasts the transmission coming from A, pays the charge for the circuit A-B, that the broadcasting organization in F pays the charge for the circuit B-F, while the broadcasting organizations in G, H and J pay for the circuits F-G, F-H and F-J respectively.

As C is not broadcasting the transmission, the broadcasting organizations in D and E should arrange in advance which of them will pay the charge for the circuit B-C. If, for example, the broadcasting organization in D agrees to pay the charge for the circuit B-C, the charges to be collected in D and in E should be based, respectively, on the use of circuits B-C-D and C-E.

If, during the use of a circuit an additional broadcasting organization is connected to any part of the international circuit, that broadcasting organization will be responsible for all additional charges concerned in that connection.

5.1.7 When several different routes exist in any given relation the total charge for each of the routes is the sum of the shares due to each country for the actual route followed. The choice of route is normally left to the discretion of Administrations. However, a broadcasting organization may request a specific route, which should be provided by the Administration concerned if possible.

In the case of direct transit of a country where the transmission is not used and when there is more than one route through that country, its Administration should normally fix a uniform transit charge for transit of its country in a given relation.

5.1.8 There is a minimum chargeable duration of three minutes for the provision of circuits used for sound- and television-programme transmissions.

5.1.9 The same charge should apply in principle to circuits used for both colour and monochrome television transmissions and normally at all times of the day and night.

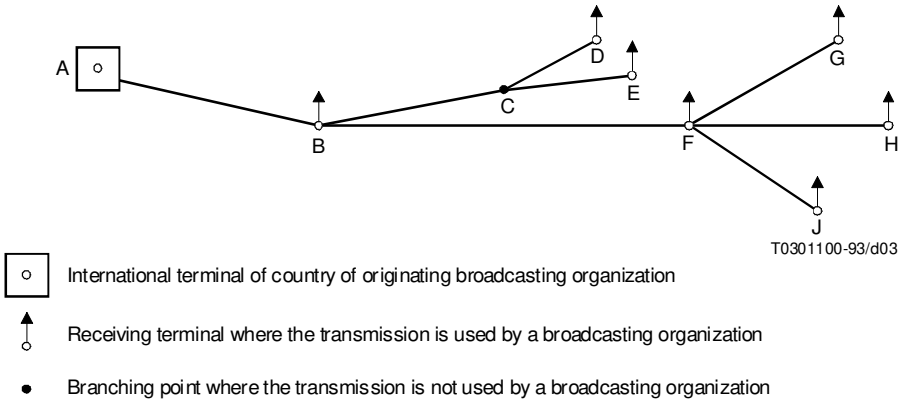

FIGURE 3/D.180

Example of the use of a network of international circuits for multiple-destination transmissions

5.1.10 Where a telephone-type circuit is provided for use as a control circuit, the appropriate telephone charge between the two terminal countries should be applied. Where additional facilities are provided in connection with such a circuit, Administrations may make appropriate charges for such facilities.

5.1.11 When the vertical blanking interval is used to transmit special signals specified by the CCIR (such as VITS, VIRS, DIS and captions for the deaf) no additional charge should be levied provided that the information is directly related to the switching, quality control or content of the TV signal.

5.1.12 The clauses applied in certain regions of the world are given in the corresponding regional Recommendations found in the D.300 R Series Recommendations. In regions for which no Recommendation has been adopted, the appropriate clauses of the D.300 R Series Recommendations could possibly be applied.

5.2 Charging for sound- and television-programme circuits furnished by means of satellite, radio or intercontinental submarine cable and used for international sound- and television-programme transmissions

5.2.1 For the provision of television circuit, a minimum charge should be made covering an initial period of 10 minutes hereinafter referred to as the *initial period charge*, plus a per-minute charge for each minute or part minute thereafter.

5.2.2 The charge for a satellite television circuit is made up of an *up part* and a *down part* charge, each including its terrestrial extension to the ITPC.

Each Administration should establish a charge for the part which it controls.

5.2.3 For the provision of circuits for sound-programme transmissions, the charge should normally have two basic elements:

1) a fixed charge designed to cover preparation and operation, and

2) a charge based on the duration of the connection which may be related to, but not necessarily the same as, the station-to-station telephone call rate.

5.2.4 For the consecutive use of the same satellite television circuit by different broadcasting organizations, only one initial period charge may be made, as though the circuit was being used by one broadcasting organization only. The duration of each of the consecutive transmissions should then be considered, for purposes of calculating the charges, at least as long as an initial chargeable period.

5.2.5 For the use of satellite circuits for multiple-destination transmissions via satellite involving:

– one part between the point of origin and the satellite (up-link);

– several parts between the satellite and the receiving earth station (down-link) of each country receiving the transmission,

the charge for the up-link normally should be divided amongst the receiving earth station countries based on the time of usage of each down-link. When this charge varies according to the point of destination, the highest charge should be applied.

The Administration providing the up-link may levy a surcharge for the common use of a satellite circuit to cover the additional costs of preparation. This surcharge should be shared by the receiving countries in proportion to their time of usage.

The same procedure may apply to any charges for circuits upstream to the connection.

5.2.6 For the provision of circuits whose direction of transmission alternates between two points in a given period, the individual durations may be summed to determine the chargeable duration in each direction.

5.2.7 When the vertical blanking interval is used to transmit special signals specified by the CCIR (such as VITS, VIRS, DIS and captions for the deaf) no additional charge should be levied provided that the information is directly related to the switching, quality control or content of the TV signal.

5.2.8 Administrations may offer services under special contractual arrangements to meet individual customer requirements such as:

a) periodic provision of circuits at fixed times and with fixed points of origination and termination;

b) provision of circuits without requirements for fixed times or fixed points of origination and termination;

c) provision of circuits during off-peak hours.

5.2.9 Administrations may apply a charge for a television-associated sound-programme circuit established by Administrations on a subcarrier of a channel used for television connection.

5.3 Determination of the chargeable duration

5.3.1 The ISPCs and ITPCs concerned in providing circuits should come to an agreement between themselves and broadcasting organizations at the end of each period of use of circuits as to the chargeable duration:

a) the time at which the ordered connection was placed at the disposal of the broadcasting organization (beginning of the chargeable duration) – this is also the beginning of the preparatory period (see Recommendations N.4 [2] and N.54 [3]);

b) the time at which the ordered connection was released by the broadcasting organization (end of chargeable duration) – sometimes referred to as the "goodnight time".

c) when necessary, the time and duration of any interruption which may have occurred.

The time at the beginning and end of the chargeable duration, as well as the time of any occurrence and duration of any interruptions are entered on a report. This report should be sent, preferably on the same day, to the office responsible for coordinating all the details necessary for the establishment of international accounts. In addition, details relative to interruptions are noted on the report sent periodically to the technical services concerned.

5.3.2 In case of disagreement, the opinion of the Administration in the receiving country on the duration of use of circuits and the duration of interruptions shall prevail, except with regard to orders which are placed and paid for at the transmitting end when the opinion of the Administration at that end shall prevail as regards the start and end times (though not as regards the duration of interruptions).

5.3.3 The start time for the use of a circuit is the time scheduled when the order is placed, unless the circuit is handed over to the customer earlier at his request. It may be later than the scheduled time only if the Administrations have failed to provide the circuit in good working order on time.

5.3.4 There should be no obligation upon Administrations to monitor transmissions continuously. Consequently broadcasting organizations should be requested always to report at once if they are not satisfied with the quality of a circuit or if there is any interruption; Administrations, however, are not responsible for notifying broadcasting organizations of interruptions.

5.4 Interruptions – allowances

5.4.1 If during the period of use of circuits, an interruption, even of short duration, occurs:

- whether on the connection, or
- in a section of that connection, or
- in one or more of the sound circuits associated with a television-programme transmission, or
- in the video circuit only of a television-programme transmission,

a credit allowance corresponding to the duration of the interruption shall be given to the broadcasting organizations affected by the interruption.

Where multiple-destination transmissions are involved, interruptions of one or more video or sound circuits receiving the television transmission shall not be considered as an interruption of the associated video or sound transmitting circuit if such video or sound transmitting circuit is continued in use for reception at another point.

5.4.2 The general test of whether an allowance is in order should be: Was the circuit used?

This implies that broadcasting organizations must decide whether to use or refuse an ordered connection.

In general, if a broadcasting organization continues to broadcast or record the programme transmission, the charges in respect of any circuits it uses remain payable in full. If, however, as a result of a fault or interruption on the circuit, no signals or faulty signals are received by one or more participating broadcasting organizations, an allowance in respect of the circuits serving each of these broadcasting organizations may be given. Each circuit used by any broadcasting organization which continues to broadcast or record the transmission remains payable in full.

Similarly, if in such circumstances broadcasting or recording of either the video or sound components of the programme (but not both) is discontinued by any broadcasting organization, an allowance in respect of the television or sound circuit concerned (but not both) may be given at that broadcasting organization's request (see also 5.4.6 below).

5.4.3 Any interruption should be reported by the broadcasting organization; however, in cases of facility failures known to the Administration, such reports may not be required. While broadcasting organizations are normally required specifically to request allowances for interruptions, such requirement may be waived at the discretion of and according to the national practices of Administrations.

5.4.4 It will be for the Administration of the country of the receiving broadcasting organization to assess the validity of any claim for allowances and to assess the allowance to be made, where necessary in consultation with the other Administrations concerned. In the event of disagreement, the opinion of the Administration of the country of the receiving broadcasting organization shall prevail over that of the other Administrations concerned.

5.4.5 Credit for interruptions should be allowed on any transmission, regardless of the interval between the receipt of the order and the start of the use of circuits.

5.4.6 It is accepted that an interruption of either the video or the sound component of a programme may render the whole transmission valueless to the customer. However, the charges for any connection which continues to be used by the customer for broadcasting or recording remain payable in accordance with 5.4.2 above.

5.4.7 All Administrations concerned in the provision of circuits should make the allowances for interruptions, regardless of where they took place.

5.4.8 No allowance will be given when the interruption is due to the negligence of the broadcasting organization or the failure of facilities provided by the broadcasting organization.

5.4.9 When a circuit failure makes it impossible to provide a connection on the planned route, or causes an interruption in a circuit, an alternative routing should be established whenever possible, provided that the broadcasting organization undertakes to pay additional charges that may apply. However, for those sound-programme circuits which can be readily rerouted, the broadcasting organization should pay the same total charge that would have applied if no failure had occurred.

5.5 Measurement of distances for terrestrial circuits

5.5.1 When part or all of the charge for the provision of circuits is based on the length of circuit, the distance is normally taken as:

- in the case of the terminal country, the crowflight distance between the ISPC or ITPC and the point where the circuit crosses the frontier;
- in the case of the transit country, the crowflight distance between the points of crossing the frontier by the circuit;
- in both cases, in order to take better account of the cost actually incurred with a radio-relay link, the point midway between the two stations on either side of the frontier may be used instead of the actual point of crossing of the section of the link straddling the frontier.

5.5.2 However, the relatively high cost of television circuits and the wide disparity in many relations between crowflight and actual distances could make it desirable to base distance measurement for television circuits on the actual distance.

Similarly, it might be appropriate to round up the actual distance in small rather than large steps (in some regions, actual distances are rounded up to the next 10 km).

It is recommended that regions should decide whether to use actual distance within their region or whether to retain the system of measurement described in 5.5.1 above for terrestrial television circuits.

6 Accounting

6.1 Collection of charges

In principle, the Administration with which the order was placed is responsible for collecting the charge for the provision of circuits from the broadcasting organization which placed the order.

6.2 Remuneration of Administrations

The Administration with which the order for the provision of circuits is placed is responsible for the remuneration of all other Administrations involved. For this purpose, all such other Administrations should send the relevant details concerning the provision of the circuits and the amounts corresponding to their credits with monthly documents, or, of required, as soon as possible by facsimile or telex, the Administration responsible for collecting charges.

6.3 For the provision of circuits for sound-programme transmissions as stated in 5.2 above, the accounting rate shall be established by agreement between the Administrations concerned. The accounting rate based on the duration, which normally corresponds to the station-to-station telephone call accounting rate, should be shared between terminal Administrations and, where appropriate, with transit Administrations in the same manner as the accounting rates for telephone calls. In addition, each Administration shall be remunerated by the predetermined amount corresponding to its part of the fixed charge as described in 5.2.3.

7 Directory for handling orders for international sound- and television-programme circuits

To ensure speedy and reliable arrangements for the provision of international sound- and television-programme circuits, it is essential that detailed information regarding the PBCs all over the world which handle orders for such circuits should be readily available to those concerned. This also applies to appropriate technical services and to the broadcasting organizations themselves.

A directory of this information has been established and kept up to date by the General Secretariat of the ITU, to which a request can be sent to obtain the necessary copies. In order that this directory be kept up-to-date and complete, each Administration should draw up an information sheet for every programme booking centre (PBC), çinternational sound-programme centre (ISPC) and çinternational television-programme centre (ITPC) under its control. It is recommended that broadcasting organizations which handle orders for international circuits should also draw up information sheets.

To this end, up-to-date information sheets should be sent to the General Secretariat of the ITU.

The information sheets should include, where applicable, the following basic particulars:

- name of country;
- name of office for which information is given (PBC, ISPC, broadcasting organization, etc.);
- name of Administration or broadcasting organization;
- postal address;
- telephone number(s);
- telex number and answerback;
- telegraphic address;
- office hours (UTC);
- languages spoken;
- senior staff and deputies;
- contact outside office hours and on holidays;
- office handling orders for leased circuits (if not PBC);
- earth station;
- local time reference UTC;
- name(s) of customer(s) for which orders are normally handled.

References

[1] CCITT Recommendation *Multiple television transmissions and coordinating centres*, Vol. IV, Rec. N.52.

[2] CCITT Recommendation *Definition and duration of the line-up period and the preparatory period*, Vol. IV, Rec. No. 4.

[3] CCITT Recommendation *Definition and duration of the line-up period and the preparatory period*, Vol. IV, Rec. N.54.