5i’

SECTION 4

OPERATION OF INTERNATIONAL TELEPHONE SERVICES

Recommendation E.140

PRINCIPLES FOR THE OPERATION OF INTERNATIONAL TELEPHONE SERVICES

The following principles should be respected as far as possible by the Administrations in the operation of international telephone services. These principles allow for the fact that certain relations depend exclusively on manually operated radiotelephone circuits. Detailed rules for the application of these principles are to be found in the *Instructions for the International Telephone Service* [8].

1 Classes of calls and facilities offered to users

1.1 *Classes of calls*

The following classes of calls are accepted in the international telephone service:

— distress (emergency) calls ;

— government calls ;

— service calls ;

— private calls

1.2 *Facilities offered to users*

The following facilities may be accepted in the international telephone service:

a) without specific agreement between Administrations:

— requests for information ;

The provisions of this Recommendation were contained in the Recommendations cited in [1] and [2].

See also Recommendations D.100 [3], D.101 [4], D.150 [5], D.151 [6] and D.170 [7].

In relations established on radio links the Administrations concerned may agree to accept subscription calls as a facility, i.e. calls normally exchanged regularly between the same stations, at the same time agreed upon in advance, for the same duration and which have been booked for a specified period. By agreement between the Administrations concerned, reduced charges may be made for subscription calls.

b) with agreement between the Administrations concerned:

— station calls ;

— personal calls ;

— collect calls ;

— credit card calls ;

— conference calls ;

— data transmission calls

1.3 A station call is a call to a specified telephone number.

1.4 A personal call is a call between the number of a caller who may give his name (or the number of an extension) and some specific person (or extension); the person required must be adequately described (by name, position, address, etc.).

If the Administration of destination admits such a possibility a messenger may be sent if the person desired could not be obtained at a telephone station and, in particular, if he or she is not a telephone subscriber.

2 Call requests

2.1 When making a request for a call which cannot be complied with immediately and subject to the provisions on the validity of call requests contained in § 2.3 below, the caller, in making his request, may specify:

a) that the call should not be set up until after a particular time, stated by him; or

b) that the call should not be set up during a given period; or

c) that the request should be cancelled at a particular time.

Note — Except where otherwise provided for in certain relations, these facilities are not admitted if the operating methods used include the setting up of calls without delay.

2.2 For any request which cannot be complied with immediately, the caller shall be free, subject to the provisions relating to the validity of call requests contained in § 2.3 below, to alter his request for a call as long as he has not been told that the call was on the point of being put through.

2.3 *Validity of call requests*

2.3.1 Requests for calls shall remain valid until 0800 (local time at the exchange of origin) of the day indicated below if not cancelled by the caller or refused by the addressee, when all the exchanges concerned are permanently open, and at the daily closing time when they are not permanently open:

i) for station calls, the day following the day on which the request was made;

ii) for personal and conference calls, the second day following the day on which the request was made.

2.3.2 This period, however, may be prolonged by not more than 8 hours:

i) when traffic routing difficulties have prevented the setting up of the call;

ii) when justified by time differences between the two corresponding exchanges.

2.3.3 In relations operated by radio circuits working on a part-time basis only, requests for calls may, by agreement between the Administrations concerned, remain valid as long as they have not been complied with, or refused by the addressee, or cancelled by the caller.

3 Setting-up of calls

3.1 In each international telephone relation , the Administrations concerned arrange by common agreement the primary route(s) and, if possible, one or more secondary routes taking into account such factors as hours of service , volume of traffic , accounting rates between Administrations , etc.

3.2 The primary route, which may follow more than one itinerary, is that which should normally be used for routing telephone traffic in a given relation.

3.3 The secondary routes are used, in particular, when there is congestion on the primary route or when transmission on this route is not of sufficiently good quality or when the call is outside the normal hours of service on the route. In advance preparation operating, if a call, after being prepared over a secondary route because the primary route was not available, cannot be put through at the first attempt, it should be completed on the secondary route. The call may, however, be transferred to the primary route, in case of necessity, when that route is no longer congested.

3.4 The collection rate in a given relation is the same, whether the primary or secondary route is used.

4 Chargeable duration of international calls

In principle, the outgoing operator is responsible for fixing the chargeable duration of the call ; however, in advance preparation operating , and by agreement between the Administrations concerned, this chargeable duration may be fixed by the operator in the controlling international transit exchange.

For collect or credit card calls , the operator at the incoming exchange may, by agreement between the Administrations concerned, be responsible for fixing the chargeable duration.

References

[1] CCITT Recommendation *Operation of intercontinental telephone service (initial system)* , White Book, Vol. II-A, Rec. E.142, ITU, Geneva, 1969.

[2] CCITT Recommendation *Operation of intercontinental telephone service (new system)* , White Book, Vol. II-A, Rec. E.143, ITU, Geneva, 1969.

[3] CCITT Recommendation *Charging for international calls in manual or semiautomatic operating* , Rec. D.100.

[4] CCITT Recommendation *Charging in automatic international telephone service* , Rec. D.101.

[5] CCITT Recommendation *New system for accounting in international telephony* , Rec. D.150.

[6] CCITT Recommendation *Old system for accounting in international telephony* , Rec. D.151.

[7] CCITT Recommendation *Monthly telephone accounts* , Rec. D.170.

[8] CCITT, *Instructions for the international telephone service* (1 October 1985), ITU, Geneva, 1985.

Recommendation E.141

INSTRUCTIONS FOR THE INTERNATIONAL TELEPHONE SERVICE

It has been noted that the rapid and reliable setting-up of international telephone calls demands perfect coordination of the operations effected by the operators involved; consequently, it is highly desirable to unify the rules for the utilization of circuits; unity can be obtained only by respecting the same operating rules.

It is therefore recommended that Administrations should apply the *Instructions for the International Telephone Service* [1].

The *Instructions* | must be observed both in the continental telephone service and in the intercontinental telephone service. However, by agreement between the Administrations concerned, special provisions may be applied to relations established on radio links (see Recommendation E.140).

The provisions of the *Instructions* | oncerning the charging of calls relate solely to the collection charges made to users, as defined in Recommendation D.150, Annex A, point A.10.

These *Instructions* | hould be regarded as an integral part of the present Recommendation, although they are contained in a separate publication.

Instructions | onsist of provisions from one or several CCITT Recommendations dealing with practical operating procedures for the handling of telecommunication traffic (e.g. acceptance, transmission, accounting.)

It is normally foreseen that a date be set for the entry into force of an amended Instruction.

Note — It is recalled that the text of Recommendation E.141 is also reproduced in the ‘‘Instructions for the International Telephone Service’’.

References

[1] CCITT, *Instructions for the international telephone service (1 October 1985)*, ITU, Geneva, 1985.

Recommendation E.142

TIME-TO-ANSWER BY OPERATORS

1 Quick answering by operators to calls made over international circuits is essential for a rapid and satisfactory telephone service and for the efficient use of such circuits.

2 To this end, a sufficient number of operators should be provided, and they should cooperate with one another, so that the answering time does not exceed 5 seconds for 80% of calls.

3 These provisions apply to both the manual and semiautomatic service for incoming operators , assistance operators , and delay operators

4 In semiautomatic operating, the time-to-answer for incoming operators, that is:

— incoming operators (code 11 or a specific number in the case of traffic with certain countries),

— delay operators (code 12 or a specific number in the case of traffic with certain countries),

should, accordingly, be the time-to-answer shown in this Recommendation.

5 In semiautomatic operating , the time-to-answer by assistance operators should be shorter than the time-to-answer by incoming operators. To this end, operators playing the double role of assistance and incoming operators should give priority to answering assistance calls.

Recommendation E.143

DEMAND OPERATING OF INTERNATIONAL CIRCUITS

In general, it is desirable in relations with manual operating to employ demand operating whenever possible.

Administrations concerned should make every effort (by ensuring that there are sufficient circuits, installations, personnel) to use demand operating.

In relations operated with preparation (outgoing or advance preparation) of calls, the Administrations concerned should make every effort to reduce delay as much as possible.

Recommendation E.144

ADVANTAGES OF SEMIAUTOMATIC INTERNATIONAL SERVICE

See also Recommendation Q.5 [1].

For the following reasons the attention of Administrations is drawn to the advantages of semiautomatic operating from the point of view of economy and the quality of service:

1) the introduction of semiautomatic operating at the incoming exchange can result in large economies in personnel;

2) the number of faults due to the equipment used for the international semiautomatic operating is very small;

3) the *efficiency* (ratio of chargeable time to total holding time) of semiautomatic circuits is very high compared with the efficiency of manual circuits operated on a demand basis;

4) the quality of the service given to users owing to the reduction in the time of setting up a call is improving considerably;

5) any type of call, station calls in particular, can be set up without difficulty over semiautomatic circuits and the use of as many semiautomatic circuits as possible is therefore recommended for an international relation.

References

[1] CCITT Recommendation *Advantages of semiautomatic service in the international telephone service* , Rec. Q.5.

Recommendation E.145

ADVANTAGES OF INTERNATIONAL AUTOMATIC SERVICE

For the following reasons, the attention of Administrations is drawn to the additional advantages resulting from the introduction of international automatic service :

1) The advantages of semiautomatic operating mentioned in Recommendation E.144 apply equally well to automatic service in respect of reliability, circuit efficiency and the satisfaction given to users.

2) The advantages of automatic service are even greater as regards staff economy, since outgoing operators are dispensed with.

3) The changeover from semiautomatic to automatic service may be done without any major modification of the international circuits or of the switching equipment at transit and incoming exchanges.

4) The above advantages have been widely confirmed by experience on a large number of international relations.

5) Such experience has also shown that, when a relation changes from demand operating (manual or semiautomatic) to automatic service, there is considerable increase in traffic.

6) The introduction of an international automatic service follows logically on the introduction of a national automatic service.

References

[1] CCITT Recommendation *Advantages of international automatic working* , Rec. Q.6.

Recommendation E.146

See also Recommendation Q.6 [1].

DIVISION OF CIRCUITS INTO OUTGOING AND INCOMING CIRCUITS

From the operating point of view the assignment of the circuits of a relation into incoming and outgoing groups is such as to facilitate the work of the operators.

Recommendation E.147

MANUALLY OPERATED INTERNATIONAL TRANSIT TRAFFIC

1 Direct circuits should be provided across transit countries whenever traffic justifies such a course; in this respect attention should be paid, for example, to the difficulties inherent in the use of an intermediate exchange for transit calls with manual operation

2 In the absence of permanent direct routes, it is helpful to provide temporary direct circuits whenever a temporary traffic flow so justifies. As far as possible, such temporary direct circuits should not be set up via the operator’s positions.

3 Whenever permanent or temporary direct circuits cannot be set up, the greatest possible degree of standardization in *the operating methods used in transit exchanges* is desirable. The following instructions will then be applied.

3.1 If the two international circuits use manual demand operating, all the international transit exchange has to do is to make arrangements to set up the transit calls in accordance with the requests made by the outgoing international exchange, which means the controlling exchange.

3.2 When, on the other hand, preparation operating is in force on either of the two international circuits, the international transit exchange becomes the controlling exchange, and

3.2.1 the controlling operator at the international transit exchange is the operator serving the most congested route. If there is no delay on the circuits to be interconnected, or if this delay is equal in both directions, the controlling operator shall be designated by the international transit exchange;

3.2.2 the controlling operator shall determine the time when a transit call is set up according to its class and priority and the time when the call request is received by the international transit exchange;

3.2.3 the controlling operator shall warn her two counterparts in the international exchanges of the time when it is expected to set up the transit call or calls in question, so that the operators in these exchanges may prepare the required circuits.

3.3 In the exceptional case when the call requires more than two international circuits, the Administrations concerned shall agree among themselves on the controlling exchange.

Recommendation E.148

ROUTING OF TRAFFIC BY AUTOMATIC TRANSIT EXCHANGES

In the two cases mentioned hereafter it may be advantageous from a general economic point of view (taking into account the loss probability and cost) to route traffic by automatic transit exchanges:

Case 1

Where there is a light traffic load between two countries, it may be desirable to route this traffic through an automatic transit exchange, rather than to provide a small group of direct circuits.

The considerations normally apply to the case where the introduction of semiautomatic operation is considered, but they should be equally valid for traffic which terminates on a manual international trunk exchange, reached through an automatic transit exchange.

Note — The purely economic point of view from which these conclusions are drawn excludes all other considerations, particularly the following:

a) It is necessary that the transit exchanges through which it is desired to route the traffic should be prepared to accept the transit traffic which would be offered to them and Administrations involved should design their circuit groups to satisfy the requirements of Part II of Fascicle II.3 in so far as loss probability is concerned.

b) The provision of direct circuits may be preferred to a routing entirely via a transit centre for other reasons, e.g. the provision of broadcast programme circuits , control circuits for these transmissions, voice-frequency telegraph circuits , etc.

Case 2

In certain cases, particularly where the traffic between two countries is heavy, and when, for instance, it may lead to the deferment of a new installation, it may be advantageous to route a certain proportion of the additional traffic (peak traffic) by way of a transit automatic centre.

Recommendation E.149

PRESENTATION OF ROUTING DATA

1 When semiautomatic or automatic service is initially introduced between two countries it is recommended that a routing document be prepared by each Administration and an adequate number of copies exchanged. This routing document should be prepared as a booklet of A5 size (14.8 × 21.0 cm), and be divided into three sections.

It seems important to keep the information up to date by exchanging data of the following types:

a) Major routing changes involving existing routes and/or offices for which data have been previously supplied. Such information should be made available at least three months prior to the effective date of the change. In this respect, the importance of notification will be governed by the volume and characteristics of the traffic affected.

b) Other routing changes in a country's networks which were not sufficiently important to be handled as described in a) above. This information should be supplied annually or more frequently when circumstances justify this course.

When forwarding routing changes under a) and b), forms on the model of Tables A or B in Section 2 of the routing document should be used, indicating whether the change is a revision or a new edition. In principle, a complete reprinting of the routing document is desirable from time to time. However, the frequency of production of a revised set of routing information should be left to the discretion of the issuing Administration. It is recommended that a revised set should be brought out not less frequently than once in five years.

Where an Administration finds it impracticable to provide all of the routing data in the manner recommended above, it is desirable that it adhere to this Recommendation to the maximum extent possible.

2 Information to be entered on the routing document

2.1 *Section 1 — Explanatory notes*

2.1.1 The issuing Administration should include the following items:

2.1.1.1 The numbering plan arrangements should be explained briefly, and the trunk prefix (if any) used in the national network should be quoted. Any useful information about the total number of digits in the national numbering system should be supplied.

2.1.1.2 The country code.

2.1.1.3 Language digits according to the availability of language assistance on incoming calls.

2.1.1.4 Name(s) of international exchange(s) used for incoming traffic. In specifying the name of the international exchange it should be indicated if it serves for continental and/or intercontinental traffic. If there is more than one exchange, an explanation should be given as to which part of the national network each exchange serves by quoting the digit(s) of the trunk code which are necessary for this purpose. Where there is no uniform system for all incoming traffic to a country, the explanatory notes should make clear the specific instructions proper to each outgoing country.

2.1.1.5 It should be explained how subscribers in other localities than those listed in Section 2 can be reached (for instance by code 11).

2.1.1.6 A table showing how to reach special services such as:

— supervisor,

— delay operator,

— transit calls,

— calls to/from ships,

— phototelegraph calls,

— collect calls,

— requests for information,

— personal calls for which word has been left at the called station.

2.1.1.7 If functions described in § 2.1.1.6 are performed on a decentralized basis, routing data will be indicated in Section 2, Tables A and B. It should be observed that if the outgoing operator does not speak any of the languages indicated, she should direct her call to the appropriate incoming international operator.

2.1.1.8 A table of public holidays when general business and financial institutions may be closed.

2.1.1.9 It is recommended that a specific address be provided by each Administration to receive routing information and to handle questions regarding internal routing arrangements and inquiries about entries in the routing document.

2.2 *Section 2 — Instructions for preparing and using routing tables*

The routing information considered appropriate for distribution to other Administrations should be set out in a standard form for ease of interpretation and in sufficient detail to enable the controlling operator to set up a connection without recourse to the incoming international operator on more than 5% of the calls.

It is in the interests of Administrations to ensure that adequate and accurate information is available to controlling operators in order that operating costs at both outgoing and incoming exchanges may be kept to the lowest figure commensurate with the cost of production and maintenance of the routing information

It is recommended that the routing information should be produced in either of the forms shown below, i.e. Table A or Table B.

H.T. [T1.149]
TABLE A
(of the routing document)

Name of locality Routing code to reach subscribers } Routing code to reach operators }	{ { Directory		
1	2	3	4

How to fill in Table A:

Column 1 — Name of locality This is the name of the community, e.g., city, town or village, which subscribers generally use to designate where their telephone service is provided.

Column 2 — Routing code to reach subscribers The routing code (trunk code) used to reach telephones in the locality.

Column 3 — Routing code to reach operators The routing code combined with a standardized operator code (see § 2.1.1.7 in explanatory notes) which permits reaching an operator performing a specific function for the locality.

Language indicator In column 3, insert, using a letter code, the language(s) spoken by the local operators. If the language(s) are spoken by all operators serving the localities listed in column 1, an explanatory note keyed to column 3 would suffice for indicating the common language(s). An explanation of the code should be annexed.

Column 4 — Directory Where applicable the reference number or letter which indicates the particular directory volume or section where the telephone numbers for the locality may be found.

Tableau A [T1.149], p.

H.T. [T2.149]

TABLE B

(of the routing document)

Name of locality	{	{			
1	2	3a	3b	3c	4

How to fill in Table B:

Columns 1, 2 and 4 See under Table A.

Column 3a This column should contain the complete code that enables a controlling operator to gain access to an incoming operator who is in a position to extend the connection to the called number and verify the station conditions.

Column 3b This column should contain the complete code that enables a controlling operator to gain access to an operator who can verify the conditions on a called station, e.g., that the number is of a working line, that there is no reply or that the line is engaged.

Column 3c This column should contain the complete code that enables a controlling operator to obtain the subscriber number of a person in the locality in question.

As it is important that the controlling operator should know that she will be able to understand the called operator, an indicator should be used, as described in the § ‘‘language indicator of Table A’’. If separate routing codes are necessary to give access to operators speaking specific languages at the incoming exchange, these should be shown with the appropriate indication against each code. A routing code in column 3a should not be repeated in column 3b.

Tableau B [T2.149], p.

The country where uniform information is available throughout its territory for access to its operators handling:

a) the completion of inward calls and verifying station conditions,

b) verification of station conditions only, and

c) local telephone number information,

ordinarily would use Table A. The method of access to these particular services would be indicated in Section 1 above and need not be repeated against the individual items in the routing schedule.

In the case where a country provides differing access points beyond its international exchange for any or all of the three categories a), b) and c) mentioned above, it would use Table B. The specific routing information to give access to the available point should be shown in sub-columns of column 3, headed respectively 3a, 3b and 3c. Where no facility exists for a particular locality there should be no entry of any kind, thus indicating the need for the controlling operator to call the international incoming operator.

2.3 *Section 3 — List of trunk (area) codes in numerical order*

It is in the interest of Administrations to incorporate this information in the routing document not only for the controlling operator but also for maintenance (e.g. fault report) and for proper application of Recommendation E.422 [1] (e.g. dialling of wrong trunk code).

Furthermore, this information can be used to prevent calls with improper routing codes from seizing the international circuits.

It is recommended that the information be given in the form shown in Table C.

H.T. [T3.149]
TABLE C
(of the routing document)

Routing code First digits after routing code } Number of digits after routing code } Identification of section or area }	{ { {		
1	2	3	4

How to fill in Table C:

Column
Routing code (trunk code) used to reach telephones in the section or area.

Column
First digits to be dialled after the routing code (not required when the number of digits after the routing code is constant).

Column
Number of digits after the routing code [not required when the national (significant) number has a fixed length].

Column
Name of the section or area.

Table C [T3.149], p.

References

[1] CCITT Recommendation *Observations on international outgoing telephone calls for quality of service* , Rec. E.422.

PUBLICATION OF A ‘‘ LIST OF INTERNATIONAL TELEPHONE ROUTES

´EF ’% Fascicle II.2 — Rec. E.150’’

1 A *List of International Telephone Routes* | s published annually. It shows for the various services:

— the primary routes ,

— the secondary routes

The *List* | s revised annually to reflect the situation on 1 January of every year.

2 The main purpose of the *List of International Telephone Routes*
| s to provide the fullest possible information to Administrations about the routings available for their international telephone traffic.

3 The basis on which the *List of International Telephone Routes*
| s compiled is described in Annex A.

ANNEX A

(to Recommendation E.150)

A.1 This *List* comprises the following five parts:

I. Europe and countries of the Mediterranean Basin

II. Africa (including the countries in that continent listed in Part I)

III. America

IV. Asia (including the countries in that continent listed in Part I) and Oceania

V. Intercontinental routes (direct links).

A.2 In the first four parts, the *List* indicates primary and secondary routes for the various relations. The *List* is divided into two columns:

— column A lists the international telephone relations ;

— column B shows primary routes and, where applicable, secondary routes for each relation.

A.3 Primary routes are indicated by the digit 1 and secondary routes by the digit 2. Where there are several routes per category, these are differentiated by an additional digit (1.1, 2.1, etc.).

A.4 Direct routes are designated by the word ‘‘direct’’ followed by the letters ‘‘/a’’ or ‘‘/m’’ indicating the mode of operation of the circuits (a = automatic and m = manual). In the case of transit, only the name of the first transit centre used is indicated, followed by ‘‘/a’’ or ‘‘/m’’ according to whether transit is automatic or manual.

With regard to Part I of the *List* , it would be advisable to indicate whether a satellite is concerned by using the abbreviation ‘‘SAT’’. If appropriate, the provisions in the third paragraph of § A.6 will also apply.

Countries in the Mediterranean Basin are countries not belonging to Europe but bordering the Mediterranean Sea.

I.e. using one of the signalling systems recommended by the CCITT (Systems R2, No. 4, No. 5, No. 6 or No. 7), whether the service offered to users is fully automatic or semiautomatic. When, on a relation normally served by automatic circuits, a small number of manual circuits still exists, only the symbol ‘‘/a’’ should be used.

Example 1

International telephone *Primary and secondary*

| fIrelations | fIroutes

A B

Denmark (including the Faroes)

Albania Rome/m

Germany (Fed. Rep. of) direct/a

Austria direct/a

. | | | | | | |

Bulgaria 1.1. Praha/m

1.2. Warszawa/m

. | | | | | | |

Iceland 1.1. direct/a/F

1.2 direct/a/SAT

. | | | | | | |

Portugal 1.1. direct/a

1.2. Paris/a

. | | | | | | |

USSR 1. | direct/m

2.1. Warszawa/m

2.2. Helsinki/m

A.5 With regard to Parts II to V of the *List* , the type of link is described by means of the following abbreviations:

— F telephone line (overhead wires, land and submarine cables, radio-relay systems, tropospheric systems),

— RT radiotelephone link,

— SAT satellite link, and

— SP satellite link set up via the SPADE system.

Example 2

A B

Congo

Algeria 1. direct/m/RT

2. Paris/m/RT

. | | | | | | |

Gabon direct/m/F

A.6 In Part VI (intercontinental routes) only *direct* | inks between countries in different continents are mentioned, i.e. connecting two countries directly without passing through a (manual or automatic) transit centre in another country; such links may be cable, satellite (including the use of SPADE) or radiotelephone.

The abbreviations referred to in §§ A.4 and A.5 above are used to describe the mode of operation (manual or automatic) and the type of link.

When differently constituted direct links (e.g. a submarine cable and a satellite link) exist in a relation between the same terminal telephone centres, they should be shown separately

If certain direct links are utilized in common by a number of countries according to special agreements, these direct links may be mentioned in a footnote for each country concerned.

Note — When a direct link is made up of two different types of section (e.g. a submarine cable and a satellite section), the type of link should be shown as follows: F + SAT.

Example 3

Intercontinental routes (direct links):

Relations between *Terminal telephone*

(country) *centres*

A B

Denmark

Argentina København-Buenos Aires/a/SP |)

Brazil København-Rio de Janeiro/a/SAT

København-Rio de Janeiro/a/SP |)

Canada København-Montreal/a/F

København-Montreal/a/SAT

København-Toronto/a/F

*) SPADE relations between the Nordic countries (Denmark, Finland, Norway and Sweden) and countries in other continents are provided via the common Nordic earth station (Tanum) and the international automatic transit centre in København (Denmark).

A.7 The mention of the name of a country or an area in this *List* does not imply, on the part of the ITU, any position with respect to the political status of such a country or area.

Recommendation E.151

CONDITIONS OF OPERATION AND SETTING UP OF | CONFERENCE CALLS

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Conference calls may be accepted in the international service by agreement between the Administrations concerned, subject to the following conditions:

1 Types of conference calls

Conference calls are normally of two types:

— bidirectional calls in which each participant can listen and speak whenever he wishes to intervene in the conversation;

Important note — The denomination ‘‘conference calls’’ without further clarification or addition has been chosen to designate communications between several subscribers in different countries, known before the Vth Plenary Assembly of the CCITT (1972) as ‘‘multiple calls’’ or as ‘‘conference (multiple) calls’’.
The tariff and accounting provisions applicable to conference calls are contained in Recommendation D.110.

— unidirectional calls in which only one of the participants can speak, the other participants being able only to listen.

However, a conference call may consist of a combination of both types of call defined above.

2 Operating conditions

2.1 The technical equipment shall in every case be such that good quality of service is guaranteed for conference calls.

Administrations wishing to offer this service shall equip at least one of their international exchanges with facilities for handling:

— bidirectional conference calls with about 10 participants;

— unidirectional conference calls with about 20 participants.

The CCITT will keep an up-to-date list of the international exchanges so equipped, with information in each case as to the maximum possible number of bidirectional or unidirectional connections. This list will also supply the names of countries which, although not possessing the appropriate equipment, agree to the setting-up of conference calls via a foreign exchange. This list shall be distributed to all Administrations.

2.2 The use of satellite circuits and of loudspeakers for conference calls is allowed provided that they are in conformity with the CCITT Recommendations in that respect.

It is recommended that several satellite circuits should not be used to set up conference calls, even though this type of circuit is being more and more widely used in both international and national links.

2.3 Conference calls may be set up by semiautomatic or manual working, according to the facilities available in the Administrations concerned.

3 Conditions for setting up a call by semiautomatic or manual working

3.1 In setting up a conference call, two diagrams may be used:

a) The operator of the country in which the originator is located connects all the called subscribers to the appropriate equipment. Each foreign participant will therefore be connected by an international circuit and the connection diagram will thus take the form of a single-star network.

b) The operator in the country in which the originator is located asks the operator in one or more foreign international exchanges with the appropriate equipment to call the called subscribers and to connect them, through that equipment, to the equipment of the international exchange of the Administration in the country of origin. In this way, several interconnected star networks will be created.

The choice of the diagram to be used for setting up each conference call shall be left to the operator in the controlling exchange (operator in the international outgoing exchange which has the appropriate equipment).

It should be noted that there are significant operating advantages in the single star network , in terms of setting up, charging and supervision of the call.

3.2 All or some of the communications making up conference calls may be set up either with specified stations or individuals (or with additional stations).

3.3 Conference calls may be granted priorities in each relation concerned for all or some of the calls involved, in accordance with the provisions cited in [1]. These calls shall normally take their turn, depending on their class and the priority with which they were requested. Nevertheless, in view of their special nature, efforts should be made to set them up as near as possible to the time specified by the originator, due regard being paid to the availability of circuits and special equipment.

3.4 Administrations which accept collect or credit card facilities for telephone calls may extend these facilities to conference calls.

In the case of a collect call, the subscriber in question shall be consulted before the call is set up in order to ascertain whether he agrees to pay the charge for the call.

4 Assessment of the chargeable duration of calls

4.1 In determining the chargeable duration of an international conference call, the basic principles outlined in Recommendation E.230 shall be applied. It should moreover be noted that:

4.1.1 the chargeable duration shall begin when all participants have been connected to the originator of the call;

4.1.2 the chargeable duration shall end when the originator gives the clearing signal;

4.1.3 if, by prior agreement, the originator of the call asks for the withdrawal or introduction of one or more participants during the call, the

original call shall be regarded as terminated. In the case of withdrawal, the end of the original call coincides with the start of the next call. In the case of an addition, the start of the next call coincides with the moment when the new participant(s) is/are connected to the others;

4.1.4 no charge shall be levied when a call cannot be set up.

Note — Some Administrations offer the facility of setting up conference calls , treated as personal calls or station calls, with the introduction or withdrawal of participants, on request, during the call. The introduction of such a service is a national affair and is not contrary to the provisions of the present Recommendation, provided that the bridging equipment for conference calls is used solely in the country of origin and that the call with each of the participants situated outside the country of origin appears in the international accounts as a separate international call of the appropriate type between the country of origin and the country of each of the participants. In this case, the provisions of § 4.1.3 above do not apply.

References

[1] CCITT, *Instructions for the international telephone service* (1 October 1985) Articles 48 and 49, ITU, Geneva, 1985.

Recommendation E.152

INTERNATIONAL FREEPHONE SERVICE (IFS)

1 Preamble

This Recommendation deals in particular with provisions for the implementation, operation, management and tarification of the international automatic freephone service. An operator-assisted freephone service may also exist on a domestic basis in some countries

2 Definition

The **international freephone service (IFS)** enables a subscriber, in one country, to be allocated, through his own Administration, one or more special telephone numbers in one or more countries which allow users in this or these countries to call the subscriber free of charge. All service and call charges are paid by the subscriber to the service. In the short term, some countries may not be able to provide IFS completely free to the caller.

2.1 *Possible applications*

In most of its applications, IFS may be considered as a marketing tool able to help companies in one country to improve their business effectiveness in other countries.

These applications may include a wide range of activities as, for instance, direct sales, customer service, emergency lines, various kinds of reservations, testing new markets, communications with agents and employees, sorting leads for sales force and credit checking.

Through the use of the service, companies can derive the benefits of increased sales, customer satisfaction, reduced operating costs, increased profitability and competitive advantage.

3 Management

The so-called ''Country Direct'' or ''International Operator Direct Calling'' (IODC) which is operated in some international relations is considered in another Recommendation.

Under this heading are mentioned the guidelines for the practical day-to-day administrative procedures concerning service ordering, maintenance and data collection.

For the sake of clarity Administration A is the Administration which has the subscriber (Administration of destination of calls) and which is

responsible for all relations with the subscriber. Administration B is the Administration responsible for the establishment of the freephone number in its country.

Each Administration should appoint a contact person responsible for all general matters relating to IFS.

3.1 *Service ordering*

3.1.1 *General procedure*

Administration A will originate the service order on behalf of the customer. The service order is converted to the format as illustrated in Annex A and sent via telefax (see Annex B), or mutually agreed telecommunications to Administration B. Administration B will verify the information on the Service Order Form (SOF) and programme the work necessary to activate the service on the date requested by the customer.

Each Administration should indicate one contact point for the exchange of service orders.

3.1.2 *Interval preceding service initiation*

The Administrations should endeavour whenever possible to complete all stages of service provision within ten working days after the service order form is issued. The term ‘‘working days’’ should be defined bilaterally.

Steps:

1:	Day 1	Request by Administration A for a freephone number
2:	Day 2	Number assigned and Administration A advised
3:	Day 3	Service order form issued (SOF)
4:	Day 4	SOF reviewed and processed
5:	Day 7	Service activation
6:	Day 8	Testing
7:	Day 10	Testing completed/Customer due date

Steps 1 and 2 may be optional.

3.1.3 *Pre-service order issuing requirements*

Administration A may have reason prior to the issue of a service order to request a freephone number assignment (for customer who wants a specific number and/or to verify the period of notice required for service initiation). A list of up to ten customer-preferred freephone numbers (within the range available) can be submitted. If the specified number and alternatives are not available, Administration B will allocate the next spare number and notify Administration A. Administration A can then request additional numbers if required.

This process will be accomplished by using the form in Annex B, or a similar one.

In normal circumstances Administration B will advise Administration A of the freephone number allocated within two days of receiving the request.

Administration B guarantees the reservation of a freephone number for two months. After this period Administration B reserves the right to cancel the reservation if another customer has made a request for it.

If no SOF is received after a number has been reserved for more than two months, Administration B may cancel the reservation. In all cases, Administration B should promptly notify Administration A about the cancellation of any reserved numbers.

3.1.4 *Preparation of service order form*

The form in Annex A which is detailed below will be used as the SOF by Administrations A and B. (Administrations may bilaterally agree to identify mandatory components of the SOF, such as ‘‘SOF Type’’, and so on.)

a) *Coordination number:* | reference number to identify the order.

b) *Date transmitted*

c) *SOF type:*

— *New:* | new service involving a new freephone number is established.

— *Change:* | n existing service requires modification.

— *Disconnect:* | n existing service is completely disconnected.

— *Suspend:* | dministration B will disconnect service but hold the freephone number for 60 days.

d) *Pending SOF supplement:*

— *No.:* | ndicate sequentially e.g., 001, 002, etc. The coordination number should be the same as that of the original SOF.

— *Modify:* | o be used when information on the original SOF needs to be changed. The ‘‘Remarks’’ section should be used to indicate the exact information being modified.

— *Due date change:* | o be used when the customer of Administration A cannot accept service on the original due date. It is important that Administration B does *not* activate the service when it cannot actually be used, or it becomes necessary, for any reason, to change the due date.

— *Cancel SOF:* | his should be received prior to the due date and will cancel the SOF and all supplements pending. The cancel SOF should contain all the information on the original SOF.

e) *Administration A order number:* | dministration A’s service request number.

f) *Customer due date:* | ypically up to ten working days may be required by Administration B for service initiation. Service will be considered to officially commence at the time and date that Administration A specified in the SOF. Note that service activation will take place three working days prior to the due date.

g) *Freephone number:* | his should be filled in when a freephone number has been pre-assigned. If a customer will accept the next available freephone number, this area should be left blank.

h) *Activation time:* | his should only be used where coordination of work is required to maintain an uninterrupted service to the customer (e.g., customer moves at specified time involving a change in terminating telephone number).

i) *Routing number:* | dministration A’s number for routing of incoming IFS calls.

j) *Subscriber access capabilities:* | ndicate quantity of terminating lines. (Used for network management purposes, see § 5.4.)

k) *Administration B use only*

l) *Directory assistance:* | ndicate ‘‘yes’’ if the customer of Administration A is to be included in the directory assistance system of Administration B.

m) *Directory listing:* | f Administration B offers inclusions in telephone directories for foreign IFS subscribers, the desired listing should be indicated by Administration A in accordance with Administration B’s format requirements, as typically shown below:

Format:

— use digits for number designations,

— use an ampersand (&) rather than ‘‘and’’,

— do not use punctuation,

— up to 50 alphanumeric characters.

n) *Additional directory listings:* | f Administration B, directly or through an agency, offers additional listings in alphabetical and/or classified directories, Administration A should indicate whether its customer is interested in arranging for any additional listings.

Note — For items l-n, the details of how these are to be accomplished should be arranged for bilaterally.

o) *Remarks:* | nter any information pertinent to this order, e.g. notify immediately of assigned freephone number.

p) *Originator:* | ame of Administration A’s coordinator and contact number(s).

3.1.5 *Freephone number assignment*

The policy for freephone number assignment can be summarized as follows:

— The numbers will be those specified by Administration B.

— Customer requested numbers may be assigned if available.

— Reserved numbers are intended for the freephone subscriber’s communication service, and are not to be resold or traded (for a fee). Any attempt to do so will result in Administration B reclaiming those numbers for reassignment.

— Administration B will not charge any additional fee for a customer requested number.

— Freephone subscribers have no legal claim to or propriety interest in any number and should be notified accordingly by Administration A.

— Freephone subscribers are not to promote their number unit before the customer due date.

— When an existing service is disconnected, Administration B number re-assignment policy will be followed.

— Administration B's should have the right to make a final decision on any freephone number issued.

3.1.6 *Directory assistance/listings*

Directory assistance in country B can be obtained at the option of the subscriber of Administration A. If subscribers wish to have their freephone number included in the directory assistance system, this must be specified in the SOF.

Details about listings should be subject to bilateral agreement.

3.1.7 *Access capabilities/line definition*

Administration A will indicate the actual number of access lines at the disposal of its subscriber. This may be used for network management purposes.

3.1.8 *Service authorization*

Both Administrations will activate the service a few days prior to the customer due date. This will allow proper testing and verification of the service before the customer defined due date.

3.1.9 *Pre-service testing*

Administration A will verify operation of the subsriber's access number and will perform pre-service testing during the days preceding the SOF due date.

Administration B will test the service on the day before the due date at the latest.

3.1.10 *Service order control*

As the originator and interface with the subscriber, Administration A should have overall control responsibilities to assure satisfactory completion of the service order and initiation of service.

3.1.11 *Abusive customers*

Administration B will notify Administration A of any unusual or abusive use of freephone calling by their subscribers. Administration A

should attempt to correct the situation as quickly as possible (e.g., convince the subscriber to solve the problem).

In extreme cases, Administration B may wish to terminate service to a subscriber who has shown an inability or lack of desire to control his international freephone service.

Administration B will consult the Administration A prior to taking any action.

3.2 *Operating practices*

3.2.1 *Operations centres*

All problems should be reported to the operation centre appointed for each Administration. These centers do the pre-service testing, troubleshooting and service performance tracking.

3.2.2 *Pre-service testing*

Each new international freephone number will be tested through the subscriber number prior to the customer due date. On the customer due date, the routing number will be released to the customer, and a final call will be made from the originating country to the subscriber's access to finish the testing.

3.2.3 *Trouble situations*

Trouble in either the inbound or outbound service is reported to the operations centre.

For trouble in the inbound service, a simulated incoming international call is set up. If the call completes to the subscriber, the trouble is referred to Administration B for testing and resolution. If the call does not complete, the trouble is corrected as soon as possible.

For outbound calls, a test call will be made on the outbound side of the international switch. If the call does not complete, the trouble will be referred to Administration A for further testing.

3.3 *Data collection*

3.3.1 *Originating country performance data collection*

Statistical data from the freephone exchange will be utilized to provide a traffic figure for all outgoing calls.

Available data will be specified by bilateral agreement.

3.3.2 *Exchange of customer performance data*

There will be no charge for the exchange of such information between Administrations. If the reports are supplied to the subscriber, Administration A will decide on the charge and will not reimburse Administration B.

4 **Customer's features**

In principle, the basic IFS is operated as described under § 2 above. As an Administration option, subscribers may be offered wider possibilities for their business activities.

Some of the more possible features are described below.

4.1 *Universal freephone number*

This feature allows a customer to be allocated one special freephone number that is the same throughout the world while calls to this

number, if required, can be routed to different destination accesses depending on the country or point of origin. For various reasons most countries currently have to allocate a restricted part of the national freephone numbering range for IFS. However, it may be possible to allocate the same numbering range for IFS within the national freephone range in each country, at least for the last digits of the freephone number. IFS subscribers should have the right to choose their freephone number from such a numbering range.

Annex C gives numbering ranges which can, as an example, be reserved for customers requesting universal freephone numbers (it is recognized however that several Administrations cannot in the short term apply this numbering scheme).

4.2 *Announcement for callers*

To inform the caller as an option (see § 5.2.2) of the unique character of the freephone number, an announcement may be given to him after assessing a freephone number. The announcement for IFS should be different from the announcement for IODC.

4.3 *Geographical zone call routing*

In general, the IFS number is related to a national terminal point (destination access) of the subscriber, so it is only possible to reach one such point from the whole of the originating country. In order to cover regional marketing districts within a country, it should be possible to choose smaller geographic areas of the country as points of origin for IFS calls.

4.3.1 *Module construction system of geographic service areas*

To enable this feature, the country has to be divided into geographic service areas, based on a module construction system, which follow traditional borders such as counties, linguistic areas, economic or political districts, or networks. Customers of the IFS must specify a destination access for all (or just a few) of these modules (geographic service areas), so that each module (service area) is related to one destination access. Depending on the geographic origin of the call, it will be routed to the predefined destination access of the IFS subscriber. Independent of the geographic origin, the caller always uses the same freephone number.

4.4 *Time-dependent call routing*

This feature enables IFS subscribers to route their traffic to alternate destination accesses at specified times of the day or days of the

week. The destination access may vary depending on:

— time (hour — minute),

— day of the week (Su — Mo — Tu — Th — Fr — Sa),

— date (day — month — year).

4.4.1 *Timetable call routing*

The different applications of standard and daylight savings times by countries should be coordinated by the Administration providing the diversion capability.

4.4.2 *Date-dependent call routing*

Subscribers may require temporary changes in their periodic seven-day cycle for public holidays or business vacations. Therefore, the subscriber may request the date depending call routing. This is a specified routing that is different from that which would normally be scheduled for this specific date.

4.4.3 *Variable (follow-me) call routing*

Subscribers may also require temporary changes in their periodic seven-day cycle for special events or campaigns. The traffic will be routed to these alternative destination accesses by activation of the subscriber. This follow-me feature is intended for non-periodic routing changes.

4.4.4 *Activation of the follow-me number*

The subscriber may either activate the follow-me number by contacting the Administration’s operational entity who will enter the proper request into the system on behalf of the subscriber, or the subscriber may interact with the system directly. In both cases, the traffic will then be routed to the alternative access instead of the destination access of the periodic routing program. It should be possible to also schedule the request for activation of the follow-me number in advance.

4.5 *Call completion on busy (traffic-dependent) call routing*

The aim of this feature is to have all calls completed in the most effective way when encountering an occupied number. This prevents ineffective seizure of network facilities, since all calls which encounter busy are stopped at, or close to, the origin. Therefore it is desirable to record the local seizure of the subscriber destination access on a real-time basis. Three subfeatures, depending on the amount/number of seizures within a specific period of time, are possible:

4.5.1 *Diversion of calls to alternative destination accesses*

This subfeature provides the capability to have call enquiries that encounter of busy after being translated to the corresponding destination access, to be routed to an alternative destination access of the subscriber. A series of alternative destination accesses may be defined. If none of these alternative accesses is available, the call will be routed to a recorded announcement or held in a queue.

4.5.2 *Queuing of calls*

This subfeature provides the capability to have call enquiries that encounter busy after being translated to all of the corresponding destination accesses, to be held in a queue until an access to the subscriber becomes available. The caller will receive a corresponding announcement. If one access is available, the call will be taken out of the queue on the FIFO principle (first in-first out) and routed to this access.

4.5.3 *Recorded announcement*

This subfeature provides the capability to route a call that cannot be completed to the subscriber access to a recorded announcement. This

announcement can be customized or standard. Depending on the reason for non-successful call completion, different announcements can be defined:

— busy: announcement for normal traffic condition;

— overload: announcement for explosive traffic conditions.

4.6 *Subscriber statistics*

This feature provides the capability to give more information about the usage and seizure of the access to the subscriber than does his monthly bill.

4.6.1 *Real time information*

This information is given to the subscriber during the local call, e.g., on his equipment display. For example:

— freephone indicator showing if the incoming call is a freephone call which has to be paid by the subscriber;

— subscriber number of the caller;

— point of origin of the call;

— billing information of the local call.

Other information should be given to the subscriber via a visual display such as:

— usage of the access lines;

— number of calls in the queue of the network;

— accounting (billing) information of the last accounting period;

— number of seizures/call attempts: 15-minute cycle for the last 24 hours;

— number of successful calls: 1-hour cycle for the last 7-day cycle.

4.6.2 *Analysis by the Administration*

Data and information are postprocessed by the Administration and given to the subscriber as listings on a periodic (e.g., monthly) basis.

a) *List of calls*

All seizures within the specified period of time are registered and listed:

— beginning of seizure/call with date and time,

— subscriber number of the caller,

— point of origin of the call,

— call response time of the subscriber,

— duration of the call.

b) *Call attempt profile*

All call attempts within a specific period (e.g., 5-minute, 15-minute, 60-minute periods) are registered, sorted according to their origin, and listed.

4.7 *Directory assistance/listing service*

Directory ASSISTANCE in the country of origin can be obtained as an option for the IFS subscriber.

Directory LISTING in the country of origin can also be obtained as an option of the IFS subscriber. Because of the unique character of freephone numbers, special pages (e.g., green pages) should be created and published in each regional listing.

To comply with the goal of a unique symbol for the IFS, the manner of writing a freephone number in listings or advertisings should be the same within participating countries.

Details are to be defined by the Human Factors Group in the CCITT.

5 Operational and technical provisions

5.1 *General description*

Subscribers who are prepared to pay charges for incoming calls may take out one or several IFS subscriptions with their Administration on the basis of the following items:

— a specific IFS number,

— available options.

5.1.1 *IFS number*

This is the number to be dialled by callers abroad allowing them to call the IFS subscriber of Administration A. The assignment of this number will be a national matter in Administration B. In addition to the following requirements, the IFS routing number should support the identification of the specific destination Administration. It consists of:

5.1.1.1 *Characteristic, prefix for IFS: the IFS access code*

The access code has the following functions:

— it gives the service a unique identity,

— it inhibits charging of outgoing calls,

— it informs the caller of the free-of-charge character of the calling procedure,

— it routes the call towards a special exchange that can handle the IFS service.

5.1.1.2 *Subscriber's freephone number*

This number is allocated by the Administration of the subscriber's country (Administration A) from a given series proposed by the Administration of the country of origin of calls (Administration B). If the subscriber wishes IFS to be provided in several countries, he should be allocated a particular IFS number for each of them but, in the long term, the IFS number could be independent of the country of origin of calls (for common numbering range, see Annex C).

5.2 *Operational requirements*

In practice, the operational requirements mentioned below may be met in different parts of the total network involved with the provision of the service and much will depend on the way the service capability is implemented by an Administration.

5.2.1 *The country of destination* | Administration A) should endeavour:

— to establish the billing procedure for its IFS subscribers autonomously,

— to collect statistical data for international accounting procedures in each relation,

— to prevent fraud or duplicate collection attempts,

— to carry out traffic observations.

5.2.2 *The country of origin* | Administration B) should endeavour:

— to ensure the free-of-charge character of the call for the caller,

— to prevent fraud attempts,

— to monitor the network to avoid a massive number of calls (counter for limiting the number of calls),

— to carry out traffic observations,

— to allow calls to be placed from any public or private telephone station,

— to allow or forbid any call routing from a given access area, and

— as an option, to inform the caller of the IFS service by means of an announcement.

5.3 *Technical requirements*

It is desirable that potential capacities and service options should be similar in both directions for a given relation. However, Administrations will be free to incorporate features and functions that do not require changes or other support by other IFS Administrations, independent of when the other Administrations are able to provide the same feature.

5.3.1 *The country of origin* | Administration B) should endeavour:

a) to screen the IFS calls for validity;

b) to forbid charging of outgoing calls;

c) to route calls where applicable towards a special exchange devoted to IFS which should verify the validity of the IFS number and translate it into the routing number indicated by the destination Administration.

Administration B will be required to translate the dialled number into the format required by Administration A.

This will normally be in the form of a routing number which will be used by Administration A to identify the called subscriber. This routing code should be kept confidential.

The structure of the routing number could consist of:

— the country code of the country of destination,

— the incoming IFS code for the country of destination,

— the country code (or prefix) of the country of origin,

— the specific number of the called subscriber;

d) to route the call after translation of the incoming number towards an outgoing international exchange;

e) to proceed with an efficient management of the network to allow regular traffic flow;

f) to prevent fraud.

Where a terminating Administration does not have terminating call processing (terminal billing) capabilities, the translation may be to a normal PSTN (public switched telephone network) number. The call will be delivered as a normal IDD (international direct dialling) call.

5.3.2 *The country of destination* | Administration A) should endeavour:

a) to identify the incoming IFS routing number for special handling as follows:

— validity verification of the received number,

— translation into the domestic number of the IFS subscriber,

— routing of the call on the domestic network,

— recording of call data for international billing and accounting purposes, and as an option,

— providing an announcement to inform the called subscriber of the type of call received,

b) to proceed with an efficient management of the network to avoid a massive number of calls;

c) to prevent fraud.

5.4 *Network management*

CCITT rules concerning the International Telephone Routing Plan also apply to IFS calls.

Moreover, Administrations should plan to provide network management facilities in their toll-free networks equivalent to that provided in their normal networks.

Advanced network management facilities may be required as IFS grows, to ensure that congestion resulting from heavy calling to one number does not adversely affect the IFS service or other mainstream services.

6 Quality of service

The quality of IFS should be a basic requirement in order to meet customer needs and achieve a satisfactory market growth.

Basic aspects to be ensured are listed below:

a) Telephone quality should be the same as for regular international telephone service.

b) Connection retention should be ensured; unwanted interruptions or excessive breaks of communication should not occur.

c) Calls should be set up in the shortest possible time in accordance with Recommendations of the E.400 Series.

d) Service activation should be provided in the shortest possible time; a period of 10 working days seems to be the goal.

e) Maintenance procedures should be set up in order to ensure an average time-to-repair as short as possible.

f) Clear billing information should be provided, on request, to the customer.

g) Service observation should be carried out in a planned manner in order to be sure that service quality requirements are guaranteed to the users (refer to Recommendations of the E.400 Series).

ANNEX A
(to Recommendation E.152)

Service order form for IFS

H.T. [T1.152]
Unable to Convert Table

Tableau 1-A/E.152 [T1.152], p.

ANNEX B

(to Recommendation E.152)

Fascimile message form

H.T. [T2.152]

	Date:	. . . . Day	. . . . Month	. . . . Year
FROM: (Administration A)	Name: Location: Facsimile No.: Contact/Information Tel. No.:			
TO: (Administration B)	Name: Location: Facsimile No.: Contact/Information Tel. No.:			
FREEPHONE NUMBER ASSIGNMENT REQUEST }	{ Customer name: 1. 2. 3.			
Remarks:				

Tableau 2-A/E.152 [T2.152], p.

ANNEX C

(to Recommendation E.152)

Example of international freephone numbering range

H.T. [T3.152]

Countries	Access code		
A	066		
B	11		
CH	046 05		
D	0130		
{ ------------------------------------ } DK	0000-0999 0430/0434 | ua)	| or IODC	|
{ ------------------------------------ } E	1000-1099 900-OX		|
{ ------------------------------------ } F	2100-2199 19 05 90		|
{ ------------------------------------ } GB	3200-3299 0 800 89		|
{ ------------------------------------ } GR	4300-4399		|
{ ------------------------------------ } I	5400-5499 1678	for freephone service	|
{ ------------------------------------ } IRL	6500-6599		|
{ ------------------------------------ } L	7600-7699		|
{ ------------------------------------ } N	8700-8799 050		|
{ ------------------------------------ } NL	9900-9999 06		|
{ ------------------------------------ } S	020 XX		|
{ ------------------------------------ } SF J	9800		|
CDN	1 800 XXX		
US	1 800 XXX		

a) From May 1989: 800

Tableau 3-A/E.152 [T3.152], p.