



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

D.170

(03/95)

**CHARGING AND ACCOUNTING
IN INTERNATIONAL TELECOMMUNICATION
SERVICES**

**MONTHLY TELEPHONE
AND TELEX ACCOUNTS**

ITU-T Recommendation D.170

(Previously "CCITT Recommendation")

FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). 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, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 1 (Helsinki, March 1-12, 1993).

ITU-T Recommendation D.170 was revised by ITU-T Study Group 3 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 20th of March 1995.

NOTE

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

© ITU 1995

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

| | <i>Page</i> |
|---|-------------|
| 1 General | 1 |
| 2 Accounts in international relations where Recommendations D.67 and D.150 apply | 1 |
| 2.1 When the accounting revenue division procedure is applied for accounting between A and B..... | 2 |
| 2.2 When the accounting revenue division procedure is not applied for accounting between A and B..... | 2 |
| 2.3 Accounting to be done by E in the cases described in 2.1.2 and 2.2.2 | 3 |
| 3 Preparation of accounts for relations to which Recommendations D.67 and D.150 do not apply | 3 |
| 4 General remarks on the preparation of accounts | 3 |
| 5 Supply of directories | 4 |
| 6 Accuracy of traffic data in monthly accounts..... | 4 |
| 7 Estimation of lost accounting records | 4 |
| 8 Traffic sampling | 4 |
| 9 Queries relating to monthly accounts..... | 5 |
| 10 Adjustments and refunds..... | 5 |
| 11 Checks of accounting data..... | 5 |
| 12 Keeping of vouchers | 6 |
| 13 Settlements of accounts..... | 6 |
| Annex A – Monthly telephone account..... | 6 |
| Annex B – Monthly telex account..... | 8 |
| References | 9 |

Recommendation D.170

MONTHLY TELEPHONE AND TELEX ACCOUNTS

(Melbourne, 1988; amended at Helsinki, 1993; revised in 1995)

1 General

1.1 The following arrangements are recommended for the drawing up, exchange and acceptance of monthly telephone and telex accounts between Administrations.

1.2 Each Administration of origin (and of transit where appropriate, e.g. in the case of 3.1.4 below) shall prepare and forward monthly accounts. These should be drawn up separately on forms of the types shown below as specimens for:

- a) telephone traffic proper – Forms 1 or 2 (see Annex A);
- b) sound- and television-programme and phototelegraph transmissions – Forms 1 or 2 (see Annex A) suitably adapted;
- c) telex traffic – Forms 1 or 2 (see Annex B).

1.3 The choice of form to be used for the accounts should be decided by the Administration which prepares the accounts, after consultation with the other Administration concerned. It may be convenient to use separate forms for originated and transit traffic.

1.4 The traffic details which must be included in the account are only those which are necessary for the purpose of international accounting. However, by agreement between the Administrations concerned, traffic information which is not essential for the accounts (e.g. the number of calls where this does not affect the accounting) may be included on the account forms.

1.5 In accordance with the *International Telecommunication Regulations* [1], monthly accounts should be sent as promptly as possible but in any case before the end of the third month following that to which they relate.

2 Accounts in international relations where Recommendations D.67 and D.150 apply

The preparation of the monthly telephone accounts shall be as follows, using as an example the diagram in Figure 1 which is a reproduction from Annex B/D.150. This diagram relates to the traffic from terminals A to B.

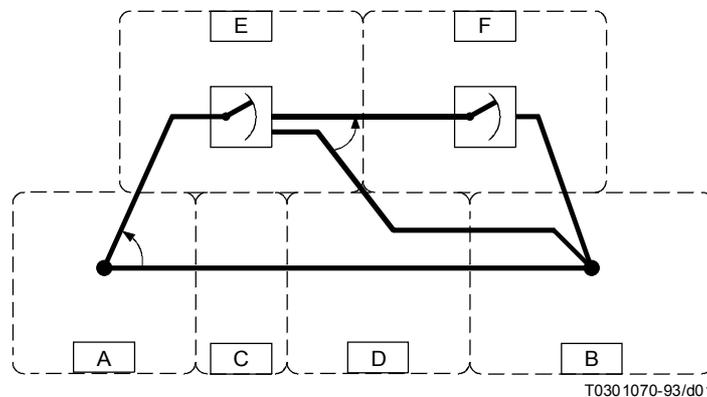


FIGURE 1/D.170

Typical pattern of circuit interconnections between various countries

2.1 When the accounting revenue division procedure is applied for accounting between A and B

2.1.1 For traffic on the direct route, A to B

A shall prepare and forward to B a monthly account crediting B with one-half of the net revenue (accounting revenue), after deduction of the amounts due from A to C and D. A shall also account with C and D, either by including their remuneration in the monthly accounts for traffic from A which terminates in each of these countries, or by sending them a copy of the monthly account prepared for B, showing in it the amounts due to C and D.

2.1.2 For traffic on the route, A to B via E

There are two possibilities:

1) *When the rate quoted by E includes an amount due to B*

A shall prepare and forward to E a monthly account crediting E for A's traffic to B via E at the rate quoted by E to cover the transit of E and of D or F and also for the destination country B.

In principle, A should include in its monthly account to B an amount crediting B with the appropriate share (normally one-half) of the gross revenue from this stream of traffic minus:

- a) the appropriate share (normally one-half) of the amount due from A to E for the transit of E (and of D or F); and
- b) the whole of the amount due from A to E for the destination country B.

(For a better understanding of these procedures, see Annex B/D.150, in particular.)

2) *When the rate quoted by E does not include an amount due to B*

A shall prepare and forward to E a monthly account crediting E for A's traffic to B via E at the rate quoted by E to cover the transit of E and of D or F.

A shall also include in its monthly account to B an amount crediting B with the appropriate share (normally one-half) of the net revenue after deduction of the amounts due (normally one-half) from A to E (the amount covering the transit by E and D or F regardless of the method of repayment: flat-rate or traffic-unit price procedure).

2.2 When the accounting revenue division procedure is not applied for accounting between A and B

2.2.1 For traffic on the direct route A to B

A shall prepare and forward to B, C and D, respectively, a monthly account crediting the amounts due from A to each of them under whatever accounting procedure has been agreed with each of them (i.e. either the traffic-unit price or the flat-rate price procedure).

If the country of destination is remunerated under the traffic-unit price procedure, the flat-rate amounts for direct-transit countries should be divided in appropriate shares (normally equal) between the two terminal countries and the traffic-unit per minute price for passage through those transit countries should be divided in the same proportion between the two terminal countries. The application of this rule is necessary if the traffic accounting between the two terminal countries is to be fair, as this traffic-unit per minute price should be used by each terminal Administration as a factor to be multiplied by the volume of outgoing traffic, which may not be the same in the two directions. Thus A will credit to B the traffic-unit price of B plus (normally one-half) of the traffic-unit price attributable to the transit of C and D.

2.2.2 For traffic on the route A to B via E

A shall prepare and forward to E a monthly account crediting E for all A's traffic to B via E, at the rate quoted by E to cover both:

- a) the transit of E and of D or F respectively;
- b) the remuneration due to B.

A shall not include this traffic in its monthly account with B.

2.3 Accounting to be done by E in the cases described in 2.1.2 and 2.2.2

E shall prepare and forward to D, F and B, respectively, a monthly account crediting to each of them the amounts due to them in respect of traffic originating in E, and shall include in these accounts the amounts due to them for traffic from A (and any other countries transited by E). However, if the method of remuneration from E to either D, F or B is flat-rate price procedure, then E shall in principle retain the amount received from A (or any other countries upstream from E) relating to the section through the country being remunerated by the flat-rate price procedure.

3 Preparation of accounts for relations to which Recommendations D.67 and D.150 do not apply

3.1 The following provisions apply to certain international relations to which Recommendations D.67 and D.150 do not apply.

3.1.1 In direct relations, the Administration of origin shall prepare and send a monthly account to the Administration of destination.

3.1.2 Where transit relations within the continent of origin are concerned, the Administration of origin shall prepare and send the monthly account to the Administration controlling the intercontinental circuit in the outgoing direction. At the same time, a copy of the account shall be sent to each of the Administrations of transit countries concerned. The account shall show the share accruing to each of the Administrations of transit countries and in addition, in one amount, the share due to the Administration controlling the intercontinental circuit in the outgoing direction and the Administrations beyond its territory.

3.1.3 The Administration controlling the intercontinental circuit in the outgoing direction shall prepare and forward a monthly account, both for traffic which originates in its own country, and for that which passes in transit through its own territory, showing in one amount the share due to the Administration operating the other end of the intercontinental circuit and, where applicable, the shares accruing to the Administrations beyond its territory.

3.1.4 The Administration operating the other end of the intercontinental circuit shall, where applicable, prepare a new account for each Administration concerned beyond its territory showing the share due to each.

3.2 In continental relations, except those covered by 2.1 above, the Administration of origin shall prepare and send a monthly account to the Administration of destination and, where appropriate, a copy to each of the transit Administrations concerned showing the amount due to each of these Administrations.

4 General remarks on the preparation of accounts

In the preparation of monthly accounts, the following should be taken into account:

4.1 Separate entries should be made in respect of traffic sent over secondary routes.

4.2 The monthly account should include appropriate special charges for telephone calls and, except when the traffic-unit price procedure as in Recommendation D.150 is applied or where there is agreement to the contrary, these special charges should be shared between the Administrations concerned in the same proportion as the charges for calls.

4.3 The collection charge for a collect telephone call is the one applicable in the country of destination of the call.

4.3.1 The Administration of the country of destination should, unless specially agreed otherwise, regard the collect telephone call as an outgoing call for the purpose of international accounting.

4.3.2 Collect telephone calls should be included in the monthly account by the billing Administration. The total number of messages, of minutes and the total settlement amounts for calls should be listed separately on the settlement statement. Settlement arrangements are as shown in Recommendation D.178.

4.3.3 The procedure described above could be applied to credit card calls subject to bilateral agreement between the Administrations concerned.

4.4 The rules for the preparation and submission of accounts for phototelegraph transmissions shall be the same as for telephone traffic proper.

4.5 In relations in which a relatively large volume of transit traffic is routed through one (or more) transit country(ies), and in particular in relations in which direct circuits exist between two terminal Administrations, the terminal Administration of arrival may, on occasion, request the terminal Administration of origin to send it directly, for information, a copy of the monthly account (or an extract from this account) relating to the transit traffic routes through a transit Administration, in order to know without delay the volume of the monthly traffic thus routed in transit.

4.6 Traffic representing test or service telex calls, expressed in minutes, should be deducted from the international accounts. If this deduction cannot be made directly (and this is especially the case with the method described under 2.3.1.2/D.61), the Administrations concerned should decide between themselves, after taking sample metering if necessary, on the percentage of such traffic to be deducted from the traffic measured.

When free calls are allowed (for example during international telecommunication conferences), deductions may be made in the international accounts by the Administration of the country on whose territory a conference is held.

5 Supply of directories

5.1 Accounting arrangements concerning the paid supply of directories shall be established in the following manner.

5.2 At least once a year, and preferably at the end of the current period of the directories concerned, each Administration that has supplied directories to another Administration, in respect of which payment is due, shall draw up a special account for the amounts due to it for such directory supplies, including postage and/or freight, and send it to the latter Administration for settlement. These amounts may be included in the monthly accounts.

5.3 Except where the Administrations have agreed otherwise, no accounts shall be established for the paid supply of directories unless the total number delivered to an Administration for service requirements and for sale exceeds 50. When the number is 50 or less, all directories shall be delivered free of charge.

6 Accuracy of traffic data in monthly accounts

The traffic data appearing in monthly traffic accounts and associated statements shall be that measured and recorded by the originating Administration in accordance with Recommendations E.260, E.261 and F.61. In some cases however, and by agreement, the records of the destination Administration, or (where applicable) the transit Administration, may be used.

7 Estimation of lost accounting records

7.1 It is the responsibility of the originating Administration to measure and record the chargeable duration of calls, in accordance with Recommendations E.260, E.261 and F.61, as stated in clause 6 above.

7.2 When a failure of the mechanism or system which records the chargeable duration of calls results in the loss of data used for the establishment on international accounts, the lost data should be reconstructed or estimated.

7.3 In some cases, the destination/transit Administration may have recorded data which may be useful in reconstructing the lost data. The destination Administration should be consulted about the availability of such data. If the means to reconstruct the data are not available, lost data can be estimated by using the average of the most recent periods of time comparable to the period of lost data, taking into account any unusual traffic conditions.

7.4 The destination Administration should be advised when accounting data has been estimated.

8 Traffic sampling

Exceptionally, traffic sampling may be used for the establishment of international accounts when the countries Administrations involved in a given traffic relation so agree. This sampling may then avoid the necessity for continuous traffic measurements. The timing, duration and frequency of the sampling will require the agreement of the Administrations involved in the given traffic relation. Where the destination/transit Administration has records of the incoming traffic in the relation, this may be used by agreement to verify or to replace sampling.

9 Queries relating to monthly accounts

In the absence of a specific agreement, it is recommended that queries relating to monthly accounts should not be made unless the differences involved exceed those shown in Table 1.

TABLE 1/D.170

| | Amount of the creditor's account | Difference exceeding |
|-------------------------|------------------------------------|---|
| Accounts in SDRs | Less than 3000 SDRs | 30 SDRs |
| | From 3000 to 100 000 SDRs | 1% of the total of the creditor's account |
| | More than 100 000 SDRs | 1000 SDRs |
| Accounts in gold francs | Less than 10 000 gold francs | 100 gold francs |
| | From 10 000 to 300 000 gold francs | 1% of the total of the creditor's account |
| | More than 300 000 gold francs | 3000 gold francs |

These limits shall apply separately to each of Forms 1 and 2 and separately also to:

- a) telephone traffic proper;
- b) sound- and television-programme and phototelegraph transmissions;
- c) telex traffic.

Queries shall not be further pursued once the difference involved no longer exceeds these limits.

A query may be justified, however, where a difference that does not qualify for query in an individual month appears to recur in subsequent months. In the case of a difference of opinion regarding the chargeable duration of a call or calls, the opinion of the Administration of origin shall prevail. Nevertheless, each Administration shall have the right to advise the Administration of origin of obvious errors in the monthly account.

10 Adjustments and refunds

For the accounting procedure in the case of adjustments and refunds, see Recommendation D.171 (telephone) and Recommendation D.177 (telex).

11 Checks of accounting data

Data relating to Forms 1 or 2 in Annexes A and B can be subject to sampling checks if the Administration of destination considers it desirable.

These traffic samples will be taken as follows:

On a given day, the Administration of destination has observations made of a number of conversations chosen at random. For each of these, a determination is made of the route concerned, the time, the called subscriber's number, and on occasion the identity of the caller. (The first three factors can be obtained in semi-automatic service as well as in manual service.) Before noon on the following day, the Administration of destination asks the Administration of origin to indicate the chargeable duration shown on the tickets for each of these calls.

An accounting check may also be made. In particular cases, where justified by the volume of traffic and by special agreement between Administrations, an official of the Administration receiving the account can visit the Administration which draws up the account, to see how the accounts are drawn up and to verify that the details of these calculations are as accurate as possible.

12 Keeping of vouchers

The vouchers which have served for the establishment of accounts should be preserved until those accounts have been settled, or in any case for at least six months.

13 Settlements of accounts

13.1 Accounts will be settled in accordance with article 6 and Appendix 1 of the *International Telecommunication Regulations* [1].

Annex A

Monthly telephone account

(This annex forms an integral part of this Recommendation)

FORM 1

Traffic from..... To For 19.....

| Month | Item | Number of minutes | Credit of B | | Credit of C | | Credit of D | |
|-------------|------|-------------------|--------------------------|---------|--------------------------|---------|--------------------------|---------|
| | | | Share of rate per minute | Total | Share of rate per minute | Total | Share of rate per minute | Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| | | 1405 | 2.40 | 3372.00 | 1.40 | 1967.00 | 1.20 | 1686.00 |
| Totals..... | | | — | | — | | — | |

NOTES

- 1 In the heading, the Administration initiating the account in respect of transit traffic should insert the word "transiting" in place of "from".
- 2 If the account does not relate strictly to a calendar month (e.g. because of the arrangements for reading traffic meters in the automatic service), the period covered by the account should be shown.
- 3 Column (1), "Month" should contain the calendar month to which the data relates (e.g. in the case of transit traffic particularly, this would usually be earlier than the month of the account).
- 4 The form should have a "Credit of" column for each country to be remunerated.
- 5 Column (2), "Item" should be used and possibly sub-divided to specify any distinction required for international accounting purposes, number of calls or call classification, special charges, etc. It may also be used to draw notice to the use of column (3) for recording number of calls or special charges rather than number of minutes.
- 6 Column (3), "Number of minutes" may be used to record either *a*) minutes of conversation time or *b*) minutes of charged time, according to the accounting procedure used. When minutes of charged time are recorded, any special charges equal to the charge for one minute or multiples thereof may be included.
- 7 Columns (4), (6) and (8), "Share of rate per minute" should show the amount for one minute payable to the Administration concerned.
- 8 Columns (5), (7) and (9), the "Total" should be obtained by multiplying the amount in columns (4), (6) and (8) respectively by the number of minutes in column (3).

FORM No. 2

Traffic from..... To..... For..... 19.....

| Month | From | To | Classification | Number of: | | Gross accounting revenue | Share of rate per minute of call | Amount due to the "to" Administration |
|--------------|------|-----|----------------|------------|---------|--------------------------|----------------------------------|---------------------------------------|
| | | | | Calls | Minutes | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| | | | Personal fee | 100 | – | 450.00 | 2.25 | 225.00 |
| | | | Full rate | | 400 | 800.00 | 1.0 | 400.00 |
| Totals | | | | | | | | |

NOTES

- 1 In the heading, the name of the Administration initiating the account should be shown as the "from" country and the name of the Administration to whom the account is directed should be shown as the "to" Administration.
- 2 If the account does not relate strictly to a calendar month (e.g. because of the arrangements for reading traffic meters in the automatic service), the period covered by the account should be shown.
- 3 Column (1), "Month" should contain the calendar month to which the data relates.
- 4 Columns (2) and (3). These should contain a separate entry for each different combination of "from" Administration (or area), "to" Administration (or area) and call classification. Terminating and transit traffic should be grouped separately, and the latter should be further sub-divided between direct transit and switched transit if different accounting rates apply to each of these categories.
- 5 Column (4), "Classification" should contain the applicable classification used to determine the accounting rate. The terms used in this column may be abbreviated; e.g. "Personal fee" to "PF" or "*taxes afférentes aux conversations personnelles*" to "TCP".
- 6 Column (5), "Number of calls" may be used to show the number of calls where this is necessary for international accounting purposes and may also be used to report the number of special charges or other individual charge items that may be necessary.
- 7 Column (6), "Number of minutes" may be used to record either *a*) minutes of conversation time or *b*) minutes of charged time, according to the accounting procedure used. When minutes of charged time are recorded, any special charges equal to the charge for one minute or multiples thereof may be included.
- 8 Column (7), "Gross accounting revenue" should show the gross amount available for distribution where reporting of such data is agreed between Administrations concerned.
- 9 Column (8), "Share of rate per minute of call" indicates the share due to the "to" Administration and, where applicable, the Administrations beyond.
- 10 Column (9), "Amount due to the "to" Administration" should include the amount due to the "to" Administration and, where transit traffic is reported, amounts due to other Administrations for traffic routes to countries beyond the "to" Administrations.

Annex B

Monthly telex account

(This annex forms an integral part of this Recommendation)

FORM 1

Traffic from..... To For 19.....

| Month | Item | Number of minutes | Credit of B | | Credit of C | | Credit of D | |
|-------------|------|-------------------|--------------------------|---------|--------------------------|---------|--------------------------|---------|
| | | | Share of rate per minute | Total | Share of rate per minute | Total | Share of rate per minute | Total |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| | | 1405 | 2.40 | 3372.00 | 1.40 | 1967.00 | 1.20 | 1686.00 |
| Totals..... | | | - | | - | | - | |

NOTES

- 1 In the heading, the Administration initiating the account in respect of transit traffic should insert the word "transiting" in place of "from".
- 2 If the account does not relate strictly to a calendar month (e.g. because of the arrangements for reading traffic meters in the automatic service), the period covered by the account should be shown.
- 3 Column (1), "Month" should contain the calendar month to which the data relates (e.g. in the case of transit traffic particularly, this would usually be earlier than the month of the account).
- 4 The form should have a "Credit of" column for each country to be remunerated.
- 5 Column (2), "Item" should be used and possibly sub-divided to specify any distinction required for international accounting purposes, number of calls or call classification, etc.
- 6 Columns (4), (6) and (8), "Share of rate per minute" should show the amount for one minute payable to the Administration concerned.
- 7 Columns (5), (7) and (9), the "Total" should be obtained by multiplying the amount in columns (4), (6) and (8) respectively by the number of minutes in column (3).

FORM 2

Account from for telex traffic sent to

For 19.....

| Month | From | To | Number of | | Share of rate per minute | Amount due |
|-------|------|-----|-----------|---------|--------------------------|------------|
| | | | Calls | Minutes | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| | | | 37 | 100 | 4.5 | 450.00 |
| | | | – | 400 | 1.5 | 600.00 |

NOTES

1 In the heading, the name of the Administration initiating the account should be shown as the “from” country and the name of the Administration to whom the account is directed should be shown as the “to” Administration.

2 If the account does not relate strictly to a calendar month (e.g. because of the arrangements for reading traffic meters in the automatic service), the period covered by the account should be shown.

3 Column (1), “Month” should contain the calendar month to which the data relates.

4 Columns (2) and (3). These should contain a separate entry for each different combination of “from” and “to” Administration. Terminating and transit traffic should be grouped separately, and the latter should be further sub-divided between direct transit and switched transit if different accounting rates apply to each of these categories.

5 Column (4), “Number of calls” may be used to show the number of calls where this is necessary for international accounting purposes.

6 Column (6), “Share of rate per minute” indicates the share due to the “to” Administration and, where applicable, the Administrations beyond.

7 Column (7), “Amount due” (to the “to” Administration) should include the amount due to that Administration, and for transit traffic also for the amounts due to Administrations beyond.

References

- [1] *Final Acts of the World Administrative Telegraph and Telephone Conference, International Telecommunication Regulations*, Melbourne, 1988.

