INTERNATIONAL TELECOMMUNICATION UNION

TELECOMMUNICATION DEVELOPMENT BUREAU

ITU-D STUDY GROUPS

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FIRST MEETING OF STUDY GROUP 1: GENEVA, 10 - 12 SEPTEMBER 1998
FIRST MEETING OF STUDY GROUP 2: GENEVA, 7 - 9 SEPTEMBER 1998

Questions : All

STUDY GROUP 1

SOURCE: CHAIRMAN, FOCUS GROUP/ITU-T STUDY GROUP 3

TITLE: LIAISON STATEMENT TO ITU-D STUDY GROUP 1: REPORT OF THE 2ND MEETING OF THE STUDY GROUP 3 FOCUS GROUP (1-3 SEPTEMBER 1998)

The second meeting of the Focus Group was held in Geneva, 1-3 September 1998. It was convened by the Chairman, Ambassador Anthony Hill (Jamaica). The plenary meeting was preceded, on the afternoon of 31st August, by an information session where presentations were made by Mr Al-Tiwaniy (Study Group 3 Vice-Chair), Mr Peter Watt (Chair, TAS Group), Mr. Pape Touré (Chair, TAF Group), Ms. Kathy O'Brien (FCC) and Mr Tim Kelly and Mr Philippe Lecharny (ITU).

The meeting considered the Chairman's Working Document (TD-3, 25th August 1998, attached). This built on the first Chairman's Working Document agreed by the Focus Group at its first plenary meeting on 8th June 1998. This constituted the only document before the Group for consideration. The document proposed an approach to the four main tasks:

a) to develop a set of figures for direct and transit relations;

b) to define an appropriate time trajectory from 1998 to a specific date to be determined;

c) to tailor transition paths taking into account the different stages of telecommunications development in different countries or regions;

d) to define the levels of contributions to a universal service fund.

There was broad agreement to follow an approach based on data derived from published settlement rates for countries/territories grouped according to different teledensity bands for the main task of developing target rates for direct relations. However, it was suggested that further consideration should be given to using criteria in addition to teledensity, such as per capita income levels. It was agreed that, in the further work, the categories of countries/territories would be reviewed in respect of numbers of categories, definition of target rates within each category, the cut-off date for published data, and additional sources of data. In considering transit relations, the approach set out in the ITU Secretariat methodological note [message 28] was generally supported.

In considering tasks b) and c), defining a time trajectory and tailoring transition paths, the proposed target of year-end 2001 was broadly acceptable. This date would of necessity vary for LDCs, or for those countries / territories with a high degree of dependence on net settlement

payments as a percentage of total telecommunication revenue, and/or other criteria. In this way, transition paths for each country / territory could be tailored.

In considering task d), contributions to meeting Universal Service goals, a suggested approach for using asymmetric arrangements met with some measure of support. In the Chairman's Working Document, it was recognised that much further work on asymmetric arrangements and USOs was required, and consequently these two issues will be considered further in methodological notes to be prepared by the ITU Secretariat. On these and other issues, additional contributions from members of the Focus Group were requested.

In the course of the meeting, a number of working papers were prepared, based on proposals made by participants, which helped to clarify the proposed approaches and indicated area for further work.

The Group agreed that, while a meeting would be useful before the deadline of 6th November 1998 for submission of a contribution to Study Group 3, it was found to be inconvenient for a number of participants. The work would continue via the e-mail reflector and it was agreed, subject to availability of resources, that a third meeting of the Group could be held just before the December meeting of Study Group 3.

Annex: Chairman's Working Document (TD-3, 25th August 1998)

Focus Group Chairman's working document (rev 2, 25 August 1998)

1. Purpose

The terms of reference for the Focus Group, as established by the World Telecommunication Policy Forum (16-18 March, 1998) and confirmed by ITU-T Study Group 3 (2-12 June 1998), call upon the Group, *inter alia*, to develop "*proposals for solutions for transitional arrangements towards cost-orientation beyond 1998, including ranges of indicative target rates*". This revised version of the Chairman's working document builds upon the approach which was discussed and revised at the first Plenary meeting of the Focus Group, held on 8th July, and draws upon submissions received by the Focus Group up to 21st August 1998, to develop a consensus text which will form the sole contribution of the Focus Group to ITU-T Study Group 3. The deadline for submission is 6th November 1998. Additionally, a proposed Annex to ITU-T Recommendation D.140 is attached. This would replace the current Annex if there were agreement within ITU Study Group 3 on transitional arrangements beyond 1998.

2. Objective

Study Group 3 agreed, at its June 1998 meeting, a revision to ITU-T Recommendation D.140 defining transitional arrangements towards cost-orientation and, as a first step, decided to recommend the reduction of accounting rates to <u>less than 1 SDR per minute,</u> after deducting transit charges, by the end of 1998 with provisions especially for the Least Developed Countries including scheduled reductions (see Annex D to Recommendation D.140 for details of these arrangements). The Focus Group's task is to propose transitional arrangements towards cost orientation *beyond* 1998, up to a date to be determined. Such a transitional arrangement could facilitate the implementation of any future remuneration systems, for instance any based on termination charges. This revised document contains proposals for such transitional arrangements and covers both direct and transit relations.

3. Tasks

Our tasks have been agreed at the first plenary meeting, held on 8th June 1998. For each agreed task (highlighted), this document reflects the proposals coming from Focus Group members and sets out an approach proposed by the Chairman.

a) to develop a set of figures for direct and transit relations which may take the form of target rates (expressed in fractions of an SDR per minute) or targets for staged reductions (expressed in percentage change per year);

Several proposals for target rates have been received and with suggestions on the factors that could be taken into account in determining targets for staged reductions:

- BT [contribution No. 6], Hong Kong China [21], AT&T [3] and Trinidad and Tobago [19] preferred to establish the initial level of the settlement rate and the target rates at the same time.
- For the initial level, Trinidad and Tobago [19] and Hong Kong China [21] propose to use current settlement rate levels with a maximum level of 0.5 SDR at 31/12/98, in line with ITU-T Recommendation D.140 Annex D.
- There is a general agreement on the need for multiple target rates which correspond to different categories of economies. Some commentators, notably AT&T [23], argue that if all economies introduce effective competition in the future, and where their traffic is equivalent, then their cost oriented rates should not differ substantially. Others, such as Mexico [13], Telecom New Zealand

[4], Cable & Wireless [16] and Trinidad & Tobago [25], contend that it cannot be presupposed that cost-oriented rates will converge.

- In order to establish those target rates, AT&T [15] and Trinidad and Tobago [25] suggest three categories of economies, Sprint [10] five categories, Hong Kong China [20] and the ITU Secretariat [18] suggest six categories. Some propose that the categories be based on socio-economic variables, such as GDP per capita or status as a Least Developed Country (LDC); others suggest using telecommunication specific variables, such as teledensity. The TAF Group [1] proposes that each economy is a category on its own, to reflect its unique circumstances. KDD [30] proposes an additional category for economies with "sufficiently competitive markets".

For determining target rates, there are different suggestions (see the summary of inputs to the work of the Focus Group, Information Paper No. 1, for different suggestions). In the following paragraphs, only the suggestions with specific data or formulae are listed:

1a) Determination of target rates for direct relations (settlement rate)

-- The TAS Group [TAS98-D1] defines price caps every year in its cost study. The price caps for the year 1999 vary between 0.331 and 0.428 SDR per minute according, to distance.

-- AT&T [7] proposes to develop a set of figure for target rates, taking the three components identified in the Recommendation D.140. Data submitted show rates of 0.1 US cents (0.0007 SDR) per minute for circuit costs on trans-oceanic cable (international transmission) and for national extension the published interconnection fee of different economies which vary between 0.0141 SDR (USA, average) and 0.054 SDR (Japan) per minute.

1b) Determination of target rates for transit shares

-- Cameroon [17] points out that the transit rates in the relations of majority of African economies are on average at 0.33 SDR and that in future, transit rates must be directed towards cost.

-- The ITU Secretariat contribution [28] on transit proposes rates varying from 0.03 to 0.06 SDR per minute depending on the volume of traffic.

2) Designated target ranges

-- The TAF Group [1] proposes to use the termination charge of each economy as its target range with a specific formula for the transitional period.

-- The TEUREM Group [cited in 8] defined in 1994 its targets ranges (international transmission -- 0.0033 to 0.0054 SDR per 100 km/min, international switch -- 0.0129 to 0.0324 SDR per minute and national extension -- 0.0762 to 0.1026 SDR per minute).

3) Estimated cost components from case studies

- The methodological note from the ITU Secretariat [2] on the case study cost elements records an average cost of between 30 to 38 US cents (0.22 - 0.28 SDR) per minute.

4) Best practice rates

-- AT&T [15] proposes to use the average of the lowest five published[1] settlement rates within three income groups:

0.052SDR, 0.097SDR, 0.20SDR

-- the ITU Secretariat [18] proposes the average of 5 lowest published settlement rates within six income groups:

0.048SDR, 0.163SDR, 0.214 SDR, 0.200SDR, 0.327SDR 0.344SDR

-- Hong Kong China [20] proposes the average of 5 lowest published settlement rates within six bands defined by teledensity (bands of greater than 40, 30-40, 20-30, 10-20, 1-10, less than 1)).

0.048SDR, 0.164SDR, 0.185 SDR, 0.240SDR, 0.244SDR 0.344SDR

5) Asymmetric rates

A number of contributions have been received advocating the use of asymmetric rates (i.e., a non 50/50 split), either in the transition towards cost-oriented rates or once cost-orientation has been achieved:

-- Hong Kong China [21] proposes to use asymmetric rates, by bilateral agreement, during the transition towards cost-oriented rates where those rates can be demonstrated to be different, though AT&T [23] argues that to implement asymmetric rates before cost-orientation has been achieved is "not logical nor supportable";

-- Trinidad & Tobago [25], supporting Hong Kong China, proposes asymmetric rates that would be defined according to teledensity (three groups) and would vary according to traffic volume (three groups) in ranges between 0.04 to 0.14 SDR, 0.30 - 0.45 SDR and 0.43-0.50 SDR per minute.

-- The European Union [11] has submitted data on national interconnect rate among EU Member States which are being implemented in an asymmetric manner, albeit at a much lower level than current average settlement rates.

Mexico [13], Brazil [24], Cameroon [17] and Cuba [29] are in favour of using the data obtained in the country case studies. Several contributions from the United States (FCC [9], AT&T [15], Sprint [10]), the EU [11], BT [14] and KDD [30] are in favour of using best practice rates. The use of cost proxies receives some support from the FCC [9] and AT&T [3], but equally some criticism from Cable & Wireless [16] and the ITU Secretariat [26]. Trinidad and Tobago [19] proposes, as one possible way forward, to use a weighted average approach combining all the options based on the number of economies selecting a particular option.

Chairman's proposed approach

The consensus approach should be simple, practical, and at the same time flexible enough to cover all likely cases. The consensus approach might be built around "best practices" among current published settlement rates. The current best practice rates are not necessarily cost-oriented for all economy groupings, but they can be interpreted as moving towards cost-orientation. It is important to note that current best practice rates may well change over time and will need to be reviewed at regular intervals.

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[1] Three economies, New Zealand, the United Kingdom and the United States, currently publish accounting rates levels. Other economies are invited to do so to assist with the work of the Focus

A1) Target rates for direct relations

The transition for each economy would start from the current settlement rate level and move towards the current average of the lowest five settlement rates in each category of economies. The transition would be completed within a specific period of time, bearing in mind that this period may be longer for some economies than for others.

Concerning the categorisation of economies, for the purpose of agreeing on target rates, it is proposed to use six categories of economies, related to teledensity, with a broadly similar number of economies in each category (see Table 1). The use of teledensity to distinguish among groups of economies at different levels of development has received strong support in e-mail exchanges and is consistent with the goals of achieving universal access and establishing target rates which are cost-oriented. Variations in teledensity appear to be a significant underlying factor in explaining cost differences between economies.

Table 1: Proposed target rates for direct relations (settlement rates)

Based on current best practice settlement rates and measured in SDRs (US cents) per minute, according to economy groupings based on 1996 teledensity (T = telephone lines per 100 inhabitants)

Teledensity band	*$T \leq 1$*	*$1 < T \leq 5$*	*$5 < T \leq 10$*	*$10 < T \leq 30$*	*$30 < T \leq 40$*	*$T \geq 40$*
No. of economies	42	36	28	47	17	36
Best practice rate in SDRs (US cents)	0.344 SDR (46.0 US cents)	0.300 (40.1 US cents)	0.257 (34.1 US cents)	0.221 (29.5 US cents)	0.164 (21.9 US cents)	0.063 (8.0 US cents)

Note: "Best practice" is defined as the average of the lowest five published settlement rates in each category. Where there are several PTOs in one economy, the average is taken.
Source: Settlement rate data adapted from OFTEL, New Zealand and FCC. Teledensity data from ITU World Telecommunication Indicators Database.

A2) Target rate for transit shares

For the transit shares, where less data is available, it is proposed to use the rates recommended in the methodological note prepared by the ITU Secretariat [28] which are defined according to volume of traffic on specific routes (see Table 2). The transit share targets would be separate and additional to the target rates defined for direct relations (settlement rates).

Table 2: Proposed target rates for transit shares

In SDRs (US cents) per minute, according to annual traffic flows (corresponding to typical circuit capacities) on different routes

Route minutes	*Routes with up to 350'000 minutes per year*	*Routes with between 350'000 and 1.5 million minutes per year*	*Routes with >1.5 million minutes per year*
Typical circuit	*64 kbit/s*	*256 kbit/s*	*1.5/2 Mbit/s*
Proposed target rate (upper limit) for transit share, in SDRs (US cents) per minute	0.06 SDR (8.0 US cents)	0.05 SDR (6.7 US cents)	0.03 SDR (4.0 US cents)

Note: Estimates of line capacity are based on a 4:1 compression ratio (e.g., a 64 kbit/s line provides four voice circuits) and an 18% capacity utilisation.
Source: ITU Secretariat, contribution 28.

b) to define an appropriate time trajectory from 1998 to a specific date to be determined until cost-orientation is achieved;

c) to tailor transition paths taking into account the different stages of telecommunications development in different countries or regions;

- The TAF Group [1] proposes a transitional period until such time that an economy reaches the level of its established termination charge, taking into account the exchange of traffic and gradual reduction of accounting rates; for those economies whose income from net settlement payments for international telecommunications amounts to more than 30 per cent of total turnover, they should achieve 0.5 SDR settlement rate level by 31 December 2003. The TAF Group [1], supported by Burundi [32], proposes four principles for tailoring the transition path: progressive reduction; a freeze in the growth of settlement balances; division of accounting revenues on other than 50/50 basis where it proves impossible to maintain strict equal division in implementing the first two principles; and accommodation of the different situations of economies.
- Hong Kong China [21] proposes that a freeze in net settlement payments be accompanies by the introduction of asymmetric arrangements in order to accelerate the reduction in accounting rates levels.
- Cameroon [17] states that the time trajectory will depend on the magnitude of the consequences due to the fall of the settlement rates and the ease with which accompanying measures can be implemented.
- The TAS Group [TAS98-R3] invites the Focus Group to take note of five factors: the level of dependence on net settlement payments; teledensity; income levels; geographical situations; and universal service obligations.
- BT [6] invites the Focus Group to consider a number of factors: the current net settlement payments; the average net settlement receipt; the consequential saving in outpayment; the dependence on net settlement payments, the income group and vulnerability to arbitrage.
- Sprint [10] proposes a fixed percentage reduction (lowest for the LDCs and highest for the high income economies) until they reach a global best practice rate.

- Cuba [29] proposes multiple transition paths and an interim global target for year-end 1999. Cuba argues that a number of telecommunication-specific indicators should be taken into account including teledensity, digitization, call completion rates and labour productivity.
- Singapore [31] notes that the global long-term trend in the compound rate of reduction in settlement rates has been 12 per cent per year.
- In the ITU Secretariat methodological note [2] on "developing ranges of indicative target rates", the transitional period for each economy runs up to the point at which the proposed target is attained. This will vary according to the average rate of change (9, 12 or 15 per cent reduction per year), taking into account four off-setting factors which are specific to each economy: average annual rate of network growth, 1990-96; percentage contribution of net settlement payments to overall telecommunications revenue; current weighted average settlement rate levels; and income group.

Chairman's proposed approach

In the fast-changing telecommunications environment, the concept of cost-orientation is a moving target which is unlikely to be permanent. Furthermore, cost-oriented rates are unlikely to be the same in different economies at different levels of traffic volume and socio-economic development. In traffic routes among competitive and liberalized markets, actual settlement rates are already below 0.05 SDR per minute in a number of cases, and national interconnect rates are substantially lower. However for other categories of economies, it will require transitional periods varying in timescales to achieve these levels.

For the purposes of the Focus Group report, a realistic foreseeable timeframe for the initial transitory period would be for a maximum period of three years after 1998 (i.e., to the end of 2001). It is unlikely that all economies could achieve cost oriented rates within this timeframe. Nevertheless, it is proposed that each economy strive to achieve the current best practice rates for its category, as defined in Table 1, by the end of 2001. In order to achieve this, it is proposed that economies plan to make staged reductions at a rate which will meet this target and which is consistent with their policy objectives and technical capacities. On this basis, the planned rate of reduction for direct relations should be no lower than the global average rate achieved over the last three years, i.e., around 12 per cent per year (see document COM 3-53). For the transit share, a faster rate of reduction is proposed to achieve the target rates within two years (i.e., before year-end 2000).

For those economies which are likely to have difficulties with such an arrangement, several exceptional factors are proposed which could be taken into account, by bilateral agreement with correspondents, when setting a rate of reduction which is quicker or slower than the global average of 12 per cent per year:

1. The gap between each Administration/ROA's current settlement rate and the best practice rate for its category. Where the Administration/ROA's existing settlement rate exceeds the best practice rate by more than 50 per cent, the rate of reduction could be faster than 12 per cent per year, especially if the total accounting rate exceeds 1 SDR on 1 January 1999. Where the Administration/ROA's current settlement rate is at or below the best practice rate for its category, the rate of reduction could be slower than 12 per cent per year.
2. The degree of dependence on net settlement payments, measured in terms of net settlements as a percentage of total telecommunication revenue. Where the degree of dependence is significant (e.g., greater than 10 per cent of total telecommunication revenue), the average rate of reduction could be slower than 12 per cent per year.
3. The status of those economies recognised by the United Nations as being among the Least Developed Countries (LDCs). For the 48 LDCs, the average rate of reduction could be slower

As a general guideline, it is proposed that the rate of reduction in any one year be no greater than 20 per cent but no less than 5 per cent, except by bilateral agreement. In addition, by bilateral agreement, it may be possible to vary the 50/50 arrangements, in the transition towards cost-oriented rates, in order to cushion sudden falls in net settlement payments, especially for the Least Developed Countries and other economies with a teledensity of less than 1 line per 100 inhabitants. Use of asymmetric arrangements could enable a faster rate of reduction in the settlement rates for those economies with a relatively low teledensity. Additional contributions from members of the Focus Group could assist in making progress on this issue.

d) to define the levels of contributions to a universal service fund or other charges which could be identified.

- AT&T [3] proposes to separate Universal Service funding from the issue of determining the actual cost for terminating international cost.
- Hong Kong China [21] proposes to create a Universal Service fund from the subsidy component in the above-cost settlement payment.
- Trinidad and Tobago [25] considers that subsidies, and the need for them to be used for network expansion etc., are national issues.

Chairman's proposed approach

In the WTO regulatory reference paper, as noted in Opinion A of the World Telecommunication Policy Forum, Universal Service is treated as a matter of national policy:

"Any Member has the right to define the kind of universal service obligation it wishes to maintain. Such obligations will not be regarded as anti-competitive per se, provided they are administered in a transparent, non-discriminatory and competitively neutral manner and are not more burdensome than necessary for the kind of universal service defined by the Member."

Notwithstanding this fact, and bearing in mind the multilateral character of the commitments made at the WTO to extending market access, Administrations/ROAs may wish to offer to terminate incoming calls at their own lowest best practice rate without seeking reciprocal access to other markets at the same rate. Such asymmetric arrangements would be particularly appropriate between Administrations/ROAs that have achieved best practice rates within their different teledensity categories. The current Annex D to ITU-T Recommendation D.140 provides for special provisions to facilitate the transition towards cost-oriented settlement rates, particularly for the Least Developed Countries and proposes "*alterations of the 50/50 arrangement to cushion revenue reductions, provided that such alterations are made within the context of an agreement to achieve cost-orientated rates*." This would be consistent with the goal of extending Universal Access and could be implemented through voluntary instruments including a Memorandum of Understanding.

Additional contributions from members of the Focus Group could assist in elaborating the modalities of how settlement payments could be used to finance universal service funds, for instance through use of asymmetric arrangements. In this context, the work of the Focus Group will be an important input to the ongoing work of ITU-T Study Group 3 and ITU-D Study Group 1.

4. Summary and data requirements

The required tasks, and the proposed mechanism to achieve each, are summarised in Table 3. The Table also shows the proposed sources of data for each and suggests additional information which may be submitted on a voluntary basis to assist the work of the Focus Group.

Table 3: Summary of proposed approach and additional data and research requirements

Task	*Proposed approach*	*Source data*	*Additional data and research requirements*
A1) To define target rates for direct relations.	"Best practices" approach based on the average of the lowest five published settlement rates in six different economy groups, defined by teledensity.	Settlement rate levels to the United States, (published by FCC, valid for 1 June 1998), United Kingdom (published by OFTEL) and New Zealand. Teledensity at 1/1/97, sourced from ITU World Telecommunication Indicators (WTI) database.	Alternative settlement rate data for other economies could be submitted and used to calculate best practice rates.
A2) To define target rates for transit shares.	"Cost proxy" approach for routes with different traffic streams.	Cost proxies derived from an analysis of international circuit costs, and leased line prices, together with a share of earth station/gateway switch costs.	Additional data relevant to transit, in particular on prices for international leased circuits and other related costs.
B) To define an appropriate time trajectory until cost-orientation is achieved.	Target rates to be achieved through staged reductions by the end of a three year period (31st December 2001)	The starting point should be the current settlement rate level. Rates published by the FCC, OFTEL and New Zealand will be used in the absence of other data.	Data on the level of settlements to economies other than the USA, the UK and New Zealand.
C) To tailor transition paths taking into account the different stages of telecommunications development in different economies or regions.	A rate of reduction necessary to achieve best practice rates within three years. This should normally be no less than the global average achieved over the last three years (-12% p.a.) Exceptional factors, should be taken into account related to the gap between the current settlement rate and the best practice rate; the dependence on net settlements; and LDC status.	Settlement rate data sourced from the FCC, OFTEL and New Zealand. National telecommunication revenue data sourced from WTI. Net settlements sourced either from WTI (all economies) or from FCC (US only). LDC status as defined by UN general Assembly.	Data on total telecommunication revenues per economy. Data on net settlement revenues.
D) To define the levels of contributions to a universal service fund or other charges which could be identified.	Universal Service regarded as national policy issue, in line with text of WTO basic telecommunications agreement, regulatory reference paper. Use of asymmetric rates, by bilateral agreement, could contribute to universal service funds.	Not applicable.	Information concerning national policies on universal access/service. Inquiry into the application of asymmetric rates.

5. Next steps

The approach proposed is reflected in the annexed text on "Transitional Arrangements to cost orientation beyond 1998" which could serve as a replacement for the current Annex D of ITU-T Recommendation D.140. The Focus Group meeting on 1-3 September 1998 will discuss the Chairman's Working Document of which the Annex is an integral part. There will be opportunity to

carry on discussion through the e-mail reflector group between September and November 1998. The Chairman's Working Document, in the form of a white contribution, will be the sole document submitted to ITU-T Study Group 3, on 6th November 1998 for consideration at its December 1998 meeting. At its December meeting, Study Group 3 will also discuss a proposed revision to the text of ITU-T Recommendation D.150, concerning an expanded menu of future remuneration options, including termination charges. Both texts could be submitted to ITU Member States for approval by accelerated procedure in the second quarter of 1999 at the same time if they are considered stable.

Annex: Draft text proposed by Focus Group Chair

TRANSITIONAL ARRANGEMENTS TO COST-ORIENTATION, BEYOND 1998

Note: This text may eventually replace the current annex D to ITU-T Recommendation D.140.

1. Preamble

This annex D to the Recommendation D.140 sets out the multilaterally-agreed transitional arrangements, to be applied bilaterally, in cases where it has not proved possible to achieve cost-oriented accounting rates and transit shares as described in ITU-T Recommendation D.140, to the satisfaction of all parties in a correspondent relationship.

2. General

Recognizing the change in the international telecommunications environment and the agreement to expand the menu of the remuneration arrangements to be incorporated into D.150, it is recommended that transitional arrangements to cost-orientation be adopted as follows:

A1) Target rates for direct relations

Rates for remuneration for the use of telecommunication facilities should be established by mutual agreement between the origin and destination Administration/ROA in a correspondent relationship. In order to provide guidance with regard to cost trends, and to facilitate the transition towards rates which are cost-oriented, transparent, and applied in a non-discriminatory manner, the target rates (upper limits) set out in Table D1 are proposed, in SDRs per minute, for economies grouped according to their level of teledensity (telephone lines per 100 inhabitants).

Table D1: Target rates for direct relations (settlement rates)

Based on current best practice settlement rates and measured in SDRs per minute, according to economy groupings based on 1996 teledensity (T = telephone lines per 100 inhabitants)

Teledensity $T \leq 1$	$1 < T \leq 5$	$5 < T \leq 10$	$10 < T \leq 30$	$30 < T \leq 40$	$T \geq 40$
0.344 SDR	0.300 SDR	0.257 SDR	0.221 SDR	0.164 SDR	0.063 SDR

Note: "Best practice" is defined as the average of the lowest five published settlement rates in each category. Each economy is treated as a single data item. Where there are multiple operators, the average is taken.
Source: ITU-T Study Group 3 Focus Group.

The rates have been calculated on the basis of "best practice" among current published settlement rates, interpreting "best practice" to be the average of the lowest five rates in each teledensity category. The target rates would normally be implemented in a symmetrical manner, at or below the target rate for the economy in the lower teledensity category. However, by mutual agreement, the targets could be applied asymmetrically, with each economy implementing the target rate of its own category.

A2) Target rates for transit shares

Target rates for direct relations shown in Table D1 exclude additional charges payable to any third parties, such as transit carriers. In order to provide guidance on cost trends, target rates (upper limits) for transit shares are proposed in Table D2, in SDRs per minute, according to the volume of traffic on a particular route. It is recommended the target rates be achieved within two years (i.e., before year-end 2000).

Table D2: Target rates for transit shares

In SDRs per minute, according to annual traffic flows (corresponding to typical circuit capacities) on different routes

Route minutes	*Routes with up to 350'000 minutes per year*	*Routes with between 350'000 and 1.5 million minutes per year*	*Routes with >1.5 million minutes per year*
Typical circuit	*64 kbit/s*	*256 kbit/s*	*1.5/2 Mbit/s*
Target rate (upper limit) for transit share, in SDRs per minute	0.06 SDR	0.05 SDR	0.03 SDR

Note: Estimates of line capacity are based on a 4:1 compression ratio (e.g., a 64 kbit/s line provides four voice circuits) and an 18% capacity utilisation.
Source: ITU Study Group 3 Focus Group.

The rates have been calculated by using average prices of international leased lines to different parts of the world, added to indicative prices for other facilities such as cable/satellite stations and international gateway switches, as a cost proxy. Transit shares would normally be payable by the Administration/ROA initiating the call.

(B) Time trajectory

It is recommended that the target rates be attained by staged reductions over a three year period, (i.e., before year-end 2001). The starting point would be the current settlement rate level.

(C) Transition paths

In negotiating settlement rates, Administrations/ROAs should apply rates of reduction which will enable them to achieve the best practice rate for their teledensity category by the end of 2001 at the latest. It is recommended that the average rate of reduction, consistent with efficiency and equity objectives, should be no lower than 12 per cent per year, which is the global average achieved over the last three years for all correspondent relations. In establishing a rate of reduction, the following exceptional factors may be taken into consideration:

1. The gap between each Administration/ROA's current settlement rate and the best practice rate for its teledensity category. Where the Administration/ROA's settlement rate exceeds the best practice rate by more than 50 per cent, the rate of reduction could be faster than 12 per cent per year, especially if the total accounting rate exceeds 1 SDR on 1 January 1999. Where the Administration/ROA's settlement rate is at or below the best practice rate for its category, the rate of reduction could be slower than 12 per cent per year.
2. The degree of dependence on net settlement payments, measured in terms of net settlements as a percentage of total telecommunication revenue. Where the degree of dependence is significant (e.g., greater than 10 per cent of total telecommunication revenue), the average rate of reduction should be slower than 12 per cent per year.
3. The status of those economies recognised by the United Nations as being among the Least Developed Countries (LDCs). For the 48 LDCs, the average rate of reduction could be slower than 12 per cent per year.

As a general guideline, it is recommended that the rate of reduction in any one year be no greater than 20 per cent but no less than 5 per cent. By bilateral agreement, it may be possible to vary the 50/50 arrangements, in the transition towards cost-oriented rates, in order to accelerate accounting

rate reductions or to cushion sudden falls in net settlement payments, especially for the Least Developed Countries and other economies with a teledensity of less than 1 line per 100 inhabitants.

(D) Level of contributions to Universal Service Obligations

The aim is to achieve remuneration rates for the termination of international calls which are cost-oriented. It is recognised that Member States have traditionally used net settlement payments to finance, in part, their Universal Service Obligations. Any Member State has the right to define the kind of Universal Service Obligation it wishes to maintain. However, such Obligations, insofar as they require the co-operation of other Administration/ROAs in a correspondent relationship, should be administered in a transparent, non-discriminatory and competitively neutral manner which is not more burdensome than necessary for the kind of universal service defined by the Member.

In order to enhance Universal Access to telecommunications among economies with low teledensity, Administrations/ROAs in a higher teledensity category may give favourable consideration to providing access to incoming calls at their own best practice rates without requiring reciprocal access at similar rates. Such favourable consideration should be voluntary and based on mutual agreement.

Annex Table 1: Summary of settlement rate levels for different teledensity groups

Tables A to F: Listing of economies by teledensity, and relevant data

Annex Table 1 : Summary of settlement rate levels for different teledensity groups

Settlement rate data is expressed in SDRs and is valid for 1st June 1998. Teledensity (Telephone lines per 100 inhabitants) is valid for 1 January 1997.

	Group A	*Group B*	*Group C*	*Group D*	*Group E*	*Group F*
Definition	Teledensity T ≤ 1	Teledensity 1 < T ≤ 5	Teledensity 5 < T ≤ 10	Teledensity 10 < T ≤ 30	Teledensity 30 < T ≤ 40	Teledensity T > 40
No. of economies	42	36	28	47	17	36
Average settlement Rates	0.643	0.621	0.525	0.425	0.287	0.160
Lowest settlement rate Economy	0.230 DPR Congo	0.250 Albania	0.200 Bosnia and Herzegovina	0.200 French Guyana / Hungary	0.120 Ireland	0.044 Sweden/United States
Average, lowest five settlement. Rates (Best Practice) Economies	**0.344** Benin, DPR Congo, Equatorial Guinea Malawi, Uganda	**0.300** Albania, Botswana, Morocco, Nicaragua, Philippines	**0.257** Bolivia, Bosnia and Herzegovina, Dominican Rep. Mayotte, Mexico	**0.221** Brunei Darussalam, Czech Republic French Guyana Hungary Slovak Republic	**0.164** Croatia Ireland Portugal Spain Guadeloupe	**0.063** Canada France Germany Sweden United States
Highest settlement rate Economy	2.073 Afghanistan	1.497 Kiribati / Vanuatu	1.123 Tuvalu	0.694 Russia	0.749 United Arab Emirates	0.375 Taiwan-China
Standard deviation	0.371	0.319	0.230	0.180	0.148	0.097

Notes: In some cases several economies in a particular group share the same level. Where there are different PTOs in a country with different settlement rates, the average of the settlement rates is recorded. Where countries have volume-based settlement rates, the main rate is taken. Where countries have peak and off-peak rates, the peak rate is taken. Where countries have asymmetric rates, the settlement rate is recorded as the rate paid by the foreign operators.

Source: Adapted from OFTEL, New Zealand and FCC (provided by Ken Stanley) data.

Data for economies, by teledensity

Table A: Group A (T ≤1)

Economy (PTO)	*Main lines (000), 1996*	*Teledensity, 1996*	*Line growth, 1990-96 (%)*	*Accounting rate to US, 1/6/98 (SDR per minute)*
Afghanistan	29.0	0.14	-3.63%	4.146 SDR
Angola	52.4	0.47	-4.70%	1 SDR
Bangladesh	316.1	0.26	4.56%	1.198 SDR ($1.60)
Benin	32.7	0.59	14.14%	0.749 SDR ($1.00)
Burkina Faso	34.1	0.32	13.20%	1.123 SDR ($1.50)
Burundi	15.2	0.25	11.38%	1.09 SDR
Cambodia	8.1	0.08	8.27%	1.8 SDR
Cameroon	70.56	0.52	9.82%	1.198 SDR ($1.60)
Central African Rep.	9.7	0.29	11.66%	1.6 SDR
Chad	6.0	0.09	6.89%	1.96 SDR
Comoros	5.0	0.79	7.29%	2 SDR
DPR Congo (average)	36.0	0.08	0.96%	0.599 SDR (80¢)
ONPTZ				0.599 SDR (80¢)
SpaceTel				0.599 SDR (80¢)
Telecel				0.599 SDR (80¢)
Congo	22.00	0.82	5.61%	1.2 SDR ($1.60)
Côte d'Ivoire	129.81	0.88	10.13%	1.475 SDR ($1.97)
Equatorial Guinea	3.7	0.89	18.87%	0.749 SDR ($1.00)
Eritrea	18.9	0.51	n.a.	1.497 SDR ($2.00)
Ethiopia	148.7	0.25	2.89%	1.347 SDR ($1.80)
Ghana	77.89	0.44	9.88%	0.749 SDR ($1.00)
Guinea	16.2	0.73	4.88%	0.8 SDR
Guinea-Bissau	7.9	0.22	6.19%	1.6 SDR
Haiti	60.0	0.82	4.91%	0.898 SDR ($1.20)
Kenya	261.41	0.82	6.91%	0.973 SDR ($1.30)
Lao P.D.R.	19.5	0.39	18.84%	2.620 SDR ($3.50)
Lesotho	16.0	0.77	4.37%	0.8 SDR
Liberia	4.5	0.16	-11.52%	0.749 SDR ($1.00)
Madagascar	39.4	0.26	3.78%	2.614 SDR
Malawi	35.5	0.35	4.89%	0.674 SDR (90¢)
Mali	21.3	0.19	11.35%	1.243 SDR (1.66)
Mauritania	10.2	0.43	9.62%	1.243 SDR ($1.66)
Mozambique	59.9	0.34	3.97%	1.05 SDR
Myanmar	178.6	0.39	16.87%	3.743 SDR ($5.00)
Nepal	112.6	0.53	11.92%	1.497 SDR ($2.00)
Niger	15.4	0.16	8.77%	0.973 SDR ($1.30)
Nigeria	412.78	0.36	6.11%	1.123 SDR ($1.50)
Rwanda	15.0	0.28	6.33%	1.310 SDR ($1.75)
Sierra Leone	17.2	0.40	4.39%	1.123 SDR ($1.50)
Somalia	15.0	0.15	0.00%	0.973 SDR ($1.30)
Sudan	99.0	0.36	8.11%	0.973 SDR ($1.30)
Tanzania	92.8	0.30	4.07%	0.898 SDR ($1.20)
Togo	24.1	0.57	14.78%	1.2 SDR
Uganda	47.9	0.24	9.45%	0.674 SDR (90¢)
Zambia	77.9	0.94	3.06%	0.823 SDR ($1.10)

Table B: Group B (1<T≤5)

Economy (PTO)	*Main lines (000), 1996*	*Teledensity, 1996*	*Line growth, 1990-96 (%)*	*Accounting rate to US, 1/6/98 (SDR per minute)*
Albania	63.85	1.74	8.11%	0.5 SDR (67¢)
Algeria	1'278.14	4.38	8.25%	0.898 SDR ($1.2)
Botswana	72.19	4.83	18.28%	0.599 SDR (80¢)
Bhutan	6.1	1.01	21.68%	2.82 SDR
China	54'947.00	4.41	41.48%	1.111 SDR ($1.48)
Cuba	356.16	3.23	0.94%	0.898 SDR ($1.2)
Djibouti	8.2	1.32	6.11%	1.123 SDR ($1.50)
D.P.R. Korea	1'100.00	4.90	5.90%	2.35 SDR ($3.14)
Egypt	3'024.95	4.99	11.17%	0.898 SDR ($1.2)
Gabon	35.00	3.16	9.10%	1.2 SDR ($1.60)
Gambia	21.3	1.89	22.96%	0.749 SDR ($1.00)
Guatemala	338.04	3.30	10.06%	0.629SDR (84¢)
Honduras	190.24	3.10	13.70%	0.823 SDR ($1.10)
India	14'542.65	1.55	19.18%	1.183 SDR ($1.58)
Indonesia (average)	4'186.03	2.11	25.60%	0.842 SDR
INDOSAT				0.842 SDR ($1.125)
SATELINDO				0.842 SDR ($1.125)
Iraq	675.00	3.28	0.00%	1.497 SDR ($2)
Kiribati	2.1	2.67	10.06%	2.994 SDR ($4.00)
Morocco	1'251.00	4.60	20.78%	0.6 SDR ($1.07)
Mongolia	92.51	3.68	5.69%	1.497 SDR ($2.00)
Nicaragua	111.40	2.63	15.75%	0.644 SDR ($0.86)
Pakistan	2'376.79	1.77	18.85%	1.348 SDR ($1.80/$1.00 5/)
Papua New Guinea	47.00	1.07	7.66%	0.9 SDR ($1.20)
Paraguay	176.32	3.56	7.78%	0.823 SDR ($1.1)
Philippines (average)	1'787.00	2.49	19.62%	0.656 SDR
Capwire				0.614 SDR (82¢)
Digitel				0.614 SDR (82¢)
ETPI				0.749 SDR ($1)
Globe Telecom				0.898 SDR ($1.2)
GMCR				0.614 SDR (82¢)
ICC Telecoms				0.614 SDR (82¢)
Islacom				0.614 SDR (82¢)
Philcom				0.614 SDR (82¢)
PLDT				0.614 SDR (82¢)
SMART				0.614 SDR (82¢)
S. Tomé & Principe	2.5	1.89	2.47%	1.6 SDR ($1.50)
Solomon Islands	7.2	1.84	8.69%	1.497 SDR ($2.00)
Samoa	8.3	4.97	12.36%	1.123 SDR ($1.50)
Senegal	95.07	1.11	13.56%	1.265 SDR ($1.69)
Sri Lanka	254.50	1.39	13.13%	1.497 SDR ($2.00)
Swaziland	22.60	2.41	8.83%	0.898 SDR ($1.2)
Tajikistan	246.63	4.17	0.45%	1.42 SDR ($1.91)
Vanuatu	4.5	2.57	9.45%	2.994 SDR ($4.00)
Viet Nam	1'186.37	1.58	51.39%	1.498 SDR ($2.30,$2.00,$1.85&$1.70 6/)
West Bank and Gaza	83.33	3.29	n.a.	n.a.
Yemen	204.7	1.29	8.64%	1.123 SDR ($1.50)
Zimbabwe	174.99	1.47	5.96%	0.973 SDR ($1.30)

Table 3: Group C (5 < T ≤10)

Economy (PTO)	*Main lines (000), 1996*	*Teledensity, 1996*	*Line growth, 1990-96 (%)*	*Accounting rate to US, 1/6/98 (SDR per minute)*
Azerbaijan	645.07	8.52	0.66%	1.3 SDR ($1.74)
Bolivia	424.94	5.60	14.98%	0.599 SDR (80¢)
Bosnia	325.98	8.41	n.a.	0.4 SDR (53¢)
Brazil	15'105.89	9.57	8.21%	0.636 SDR (85¢)
Cape Verde	25.2	6.37	20.49%	0.749 SDR ($1.00)
Dominican Rep. (average)	665.01	8.26	11.76%	0.555 SDR
AAC&R-Dominican Rep.				0.180 SDR (24¢/22¢ & 10¢)
CODETEL with: (ave)				0.543 SDR
AT&T				0.599 SDR (80¢)
MCI				0.449 SDR (60¢)
Sprint				0.599 SDR (80¢)
WorldCom				0.524 SDR (70¢)
ITC				0.974 SDR ($1.30/$0.60/$0.60 5/ 6/)
TRICOM				0.524 SDR (70¢)
Ecuador	857.00	7.33	9.75%	0.749 SDR ($1)
El Salvador	325.26	5.61	17.28%	0.659 SDR (88¢)
Fiji	70.02	8.78	8.71%	1.362 SDR ($1.82)
Guyana	50.19	5.99	25.25%	1.272 SDR ($1.70)
Iran (I.R.)	5'824.97	9.53	17.63%	1.572 SDR ($2.1)
Jordan	345.21	6.19	5.82%	1.123 SDR ($1.5)
Kyrgyzstan	342.02	7.47	1.43%	1.497 SDR ($2.00)
Maldives	15.3	5.81	16.08%	1.871 SDR ($2.50)
Marshall Islands	3.38	5.92	37.49%	1.048 SDR ($1.4)
Mayotte	6.62	6.56	15.41%	0.49 SDR (65¢)
Mexico (average)	8'826	9.28	8.69%	0.524 SDR
Telmex				0.524 SDR (70¢ 4/)
Alestra				0.524 SDR (70¢ 4/)
Micronesia	8.24	7.56	22.47%	0.749 SDR ($1)
Namibia	85.55	5.43	8.31%	0.861 SDR ($1.15)
Oman	197.69	8.59	11.18%	1.655 SDR ($2.21)
Peru	1'435.15	5.99	16.83%	0.711 SDR (95¢)
Syria	1'199.00	8.20	15.83%	1.310 SDR ($1.75)
Thailand	4'200.16	7.00	21.21%	0.786 SDR ($1.05)
Tonga	7.78	7.90	10.04%	1.497 SDR ($2)
Tunisia	585.24	6.40	11.61%	0.7 SDR (93¢)
Turkmenistan	338.20	7.40	7.43%	1.25 SDR ($1.67)
Tuvalu	0.5	5.04	27.02%	2.246 SDR ($3.00)
Uzbekistan	1'531.30	6.68	1.47%	1.272 SDR ($1.7)

Table D: Group D (10 < T ≤30)

Economy (PTO)	*Main lines (000), 1996*	*Teledensity, 1996*	*Line growth, 1990-96 (%)*	*Accounting rate to US, 1/6/98 (SDR per minute)*
Argentina	6'119.56	17.38	12.08%	0.584 SDR (78¢)
Armenia	579.50	15.40	0.57%	1.123 SDR ($1.50/$0.50 6/)
Belize	29.60	13.33	9.34%	0.898 SDR ($1.2)
Bahrain	144.39	24.12	7.42%	1.078 SDR ($1.44)
Belarus	2'127.97	20.76	5.15%	0.673 SDR (90¢)
Brunei Darussalam(av)	78.79	25.83	14.48%	0.462 SDR
Jabatan Telekom				0.7 SDR (93¢)
DSTCom				0.224 SDR (30¢)
Chile (average)	2'247.98	15.59	17.37%	0.711 SDR
Bell South				0.673 SDR (90¢)
Chilesat				0.673 SDR (90¢)
CIDCOM Larga Distancia				0.749 SDR ($1.00)
CTC				0.673 SDR (90¢)
ENTEL				0.823 SDR ($1.10)
VTR Telecomunications				0.673 SDR (90¢)
Colombia	4'645.45	13.04	11.52%	0.749 SDR ($1)
Costa Rica	525.68	15.47	10.97%	0.599 SDR (80¢)
Czech Republic	2’817	27.31	9.62%	0.45 SDR (60¢)
Dominica	18.74	25.23	8.27%	0.606 SDR (81¢)
Estonia	438.81	29.87	5.40%	0.55 SDR (73¢)
French Guyana	44.18	28.87	6.43%	0.4 SDR (53¢)
French Polynesia	49.87	22.36	4.55%	1.871 SDR ($2.50)
Georgia	567.40	10.49	0.83%	1.123 SDR ($1.50)
Grenada	24.10	24.44	7.98%	0.606 SDR (81¢)
Hungary	2’661	26.06	17.80%	0.4 SDR (53¢)
Jamaica (average)	353.00	14.03	22.34%	0.654 SDR
Telecom of Jamaica				0.936 SDR ($1.25)
Jamaica Digiport Int'l.				0.165 SDR (22¢)
Jamaica Communications				0.861 SDR ($1.15)
Kazakhstan	1'916.59	11.59	6.23%	1.0 SDR ($1.34)
Kuwait	391.84	22.39	2.83%	1.15 SDR ($1.54)
Latvia	739.20	29.55	2.97%	0.6 SDR (80¢)
Lebanon	460.58	14.93	7.41%	1.310 SDR ($1.75)
Libya	380.00	13.52	9.54%	0.599 SDR (80¢)
Lithuania (average)	992.63	26.78	4.08%	0.543 SDR
Lithuanian Telecom				0.711 SDR (95¢)
Omnitel				0.374SDR (50¢)
Malaysia (average)	3'771.31	17.81	15.53%	0.522 SDR
CELCOM				0.524 SDR (70¢)
MAXIS				0.524 SDR (70¢)
Mutiara				0.449 SDR (60¢)
Surikat Telekom Malaysia				0.591 SDR (79¢)
Mauritius	183.86	16.22	22.08%	1.123 SDR ($1.50)
Moldova	593.33	13.70	4.25%	1.497 SDR ($2)
New Caledonia	45.57	24.11	8.21%	1.422 SDR ($1.90)
Panama	325.28	12.16	7.06%	0.763 SDR ($1.02)
Poland	6’532	16.91	12.09%	0.524 SDR (70¢)

Table D: (continued) Group D (10 < T ≤30)

Romania	3'161.25	13.98	4.95%	0.76 SDR ($1.01)
Qatar	133.51	23.93	6.39%	1.497 SDR ($2.00)
Russia (average)	25'914.51	17.54	3.82%	1.380 SDR
Aerocom, Ltd.				0.600 SDR (80¢ & 68¢ 6/)
Astelit				0.86 SDR ($1.15)
Baltic Communications Ltd.				0.86 SDR ($1.15)
Comstar Telecom				1.84 SDR ($2.46)
Rostelcom				1.048 SDR ($1.4)
Leningrad Trunk Line				1.946 SDR ($2.6)
Ministry of Public Telecom				1.946 SDR ($2.6)
MTUTI and W&R				1.946 SDR ($2.6)
Nakhoda Telecom				1.497 SDR ($2)
Ramsatcom				1.579 SDR ($2.12)
Sakhalin Island				1.497 SDR ($2)
Sovintel				1.123 SDR ($1.5)
Zond-Sviaz				0.749 SDR ($1)
Tatincom				1.946 SDR ($2.6)
Teleport-TP				1.579 SDR ($2.12)
Vostoktelecom				1.198 SDR ($1.6)
Saudi Arabia	2'003.56	10.64	8.41%	1.5/1.2 SDR ($2.00/1.60) 5/
Seychelles	14.86	19.56	9.38%	1.123 SDR ($1.50)
Slovak Republic	1'246.47	23.19	9.81%	0.5 SDR (67¢)
South Africa	4'258.64	10.05	4.26%	0.599 SDR (80¢)
St. Lucia	33.78	23.46	12.13%	0.606 SDR (81¢)
St. Vincent	19.35	17.12	6.69%	0.606 SDR (81¢)
Suriname	56.84	13.16	7.58%	1.618 SDR ($2.16 & $1.95 6/)
Turkey	14’286	22.35	13.00%	0.55 SDR (73¢)
Uruguay	669.03	20.89	8.27%	0.749 SDR ($1.00)
TFYR Macedonia	367.26	17.44	4.27%	0.7 SDR (93¢)
Trinidad & Tobago	219.55	17.37	4.88%	0.606 SDR (81¢)
Ukraine	9'241.00	18.09	4.67%	0.973 SDR ($1.3)
Venezuela	2'666.85	11.74	10.22%	0.644 SDR (86¢)
FR Yugoslavia	2'081.58	19.69	6.23%	0.7 SDR (93¢)

Table E: Group E (30 < T ≤40)

Economy (PTO)	*Main lines (000), 1996*	*Teledensity, 1996*	*Line growth, 1990-96 (%)*	*Accounting rate to US, 1/6/98 (SDR per minute)*
Aruba	33.58	39.08	10.23%	0.569 SDR (76¢)
Bahamas	89.46	31.50	4.21%	0.450 SDR (60¢ & 30¢ 5/)
Barbados	96.55	36.49	4.98%	0.786 SDR ($1.05)
Bulgaria	2'647.46	31.67	3.33%	0.524 SDR (70¢)
Croatia	1'389.03	30.91	9.12%	0.4 SDR (53¢)
Greenland	21.12	37.73	4.09%	0.5 SDR (67¢)
Guadeloupe	170.75	39.62	6.35%	0.4 SDR (53¢)
Ireland	1’390	38.33	5.94%	0.24 SDR (32¢)
Macao	161.49	38.87	9.60%	0.898 SDR ($1.20)
Neth. Antilles	81.19	38.20	9.54%	0.569 SDR (76¢)
Portugal	3’724	37.48	7.75%	0.35 SDR (47¢)
Puerto Rico	1'254.09	33.57	3.81%	n.a.
Réunion	225.85	33.88	5.65%	0.49 SDR (65¢)
Spain	15’412	39.24	3.41%	0.25 SDR (34¢)
St. Kitts and Nevis	15.64	38.16	8.27%	0.749 SDR ($1.00)
Slovenia	663.59	33.41	7.84%	0.5 SDR (67¢)
United Arab Emirates	738.07	32.66	10.91%	1.498 SDR ($2.00 & $1.30 5/)

Table F: Group F (T > 40)

Economy (PTO)	*Main lines (000), 1996*	*Teledensity, 1996*	*Line growth, 1990-96 (%)*	*Accounting rate to US, 1/6/98 (SDR per minute)*
Andorra	30.96	43.61	6.27%	0.42 SDR (56¢)
Antigua & Barbuda	28.00	40.81	9.80%	0.606 SDR (81¢)
Australia (average)	9'500	51.88	3.37%	0.156 SDR
AAP Telecom PTY				0.225 SDR (030¢)
OPTUS				0.112 SDR (15¢ & 15¢ or less 8/)
Telstra				0.22 SDR (29¢)
AxiCorp-Primus				0.150 SDR(20¢)
TNS-Telegroup				0.075 SDR (10¢)
Austria	3'778	46.89	2.69%	0.2 SDR (27¢)
Belgium	4'725	46.51	3.20%	0.2 SDR (29¢)
Bermuda	48.52	80.68	4.47%	0.524 SDR (70¢)
Canada (average)	18'050	60.23	2.80%	0.150 SDR
Fonorola				0.150 SDR (20¢ & 12¢ 5/)
Stentor				0.150 SDR (20¢ & 12¢ 5/)
AT&T Canada/Unitel				0.150 SDR (20¢ & 12¢ 5/)
Cyprus	366.36	55.48	6.87%	0.7 SDR (93¢)
Denmark	3'251	61.91	1.86%	0.2 SDR (27¢)
Faroe Islands	22.86	52.68	0.02%	n.a.
Finland (average)	2'813	54.80	0.87%	0.275 SDR
Oy Finnet				0.226 SDR (33¢)
Telecom Finland				0.3 SDR (40¢)
Telivo Oy				0.3 SDR (40¢)
France	32'900	56.35	2.67%	0.15 SDR (20¢)
Germany	44'100	53.77	5.55%	0.15 SDR (20¢)
Guam	69.92	45.79	10.20%	0.187 SDR (25¢)
Guernsey	44.03	71.60	4.57%	n.a.
Hong Kong China	3'451.24	54.69	5.70%	0.52 SDR (69¢)
Iceland	155	57.61	2.96%	0.55 SDR (73¢)
Israel (average)	2'539.12	44.09	7.71%	0.441 SDR
Barak				0.441 SDR (59¢)
Bezeq				0.441 SDR (59¢)
Golden Lines				0.441 SDR (59¢)
Italy	25'259	44.02	2.06%	0.24 SDR (32¢)
Japan (average)	61'525	48.88	2.03%	0.3 SDR
International Digital				0.3 SDR (40¢)
Japan Telecom				0.3 SDR (40¢)
Kokusai Denshin Denwa				0.3 SDR (40¢)
Jersey	64.47	73.39	4.33%	n.a.
Korea (Rep.) (average)	19'600	43.03	6.71%	0.636 SDR
DACOM				0.636 SDR (85¢)
Korea Telecom				0.636 SDR (85¢)
ONSE				0.636 SDR (85¢)
Luxembourg	244	59.15	4.86%	0.2 SDR (27¢)
Malta	180.61	48.30	5.87%	0.4 SDR (53¢)
Martinique	163.31	41.62	4.97%	0.4 SDR (53¢)
Netherlands	8'431	54.04	3.30%	0.16 SDR (21¢)
New Zealand (average)	1'782	48.40	3.27%	0.2 SDR
CLEAR				0.2 SDR (27¢)
TNZI				0.2 SDR (27¢)

Table 1F: (continued) Group F (T > 40)

Northern Marianas	20.98	42.81	n.a.	n.a.
Norway	2’440	55.69	2.27%	0.16 SDR (21¢)
Singapore	1'562.68	43.26	6.78%	0.54 SDR (72¢)
Sweden (average)	6’032	68.21	0.52%	0.088 SDR
Tele2				0.08 SDR (11¢)
Tele8				0.09 SDR (12¢)
Telia AB				0.09 SDR (12¢)
Telenordia AB				0.09 SDR (12¢)
Switzerland	4’546	64.21	2.40%	0.22 SDR (30¢)
Taiwan-China	10'010.61	46.62	8.02%	0.749 SDR ($1.00)
United Kingdom (aver.)	30’677	52.19	3.22%	0.188 SDR
British Telecom				0.15 & 0.1SDR (20¢/13¢) 6/
Mercury				0.4 & 0.1 SDR (53¢/13¢) 6/
Energis				0.1 SDR (13¢)
Global One				0.1 SDR (13¢)
United States	170’568	64.25	3.80%	0.1 SDR (13¢)
Virgin Islands (US)	59.47	56.10	3.93%	n.a.