



INTERNATIONAL TELECOMMUNICATION UNION

**TELECOMMUNICATION
DEVELOPMENT BUREAU**
ITU-D STUDY GROUPS

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THIRD MEETING OF STUDY GROUP 2: GENEVA, 18 - 22 SEPTEMBER 2000

FOR ACTION

Question 12/1: Tariff policies, tariff models and methods of determining the cost of national telecommunication services

STUDY GROUP 1

SOURCE: TELECOMMUNICATION DEVELOPMENT BUREAU (BDT)

TITLE: ANALYSIS OF RESPONSES TO QUESTIONNAIRE ON TARIFFS

Action required:

Participants are invited to consider the conclusions drawn from the analysis of the questionnaire and to make recommendations for future surveys of this kind.

Abstract:

At the meeting of the Working Group on Question 12/1 held in Geneva on 1 and 2 March 1999, participants emphasized the need for information on tariff models and methods of determining the costs of national telecommunication services.

It was therefore decided, in the framework of Question 12/1, to distribute a questionnaire on tariffs to all administrations of ITU Member States and to ITU-D Sector Members, to which a total of 88 replies were received (the list of those countries/administrations having responded to the questionnaire appears in Annex 1).

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The information received was analysed in two stages. The first stage, which consisted in an examination of the total numbers of "yes" and "no" answers to questions, gives a general overview of the percentage rates of use of methods for calculating tariffs. The responses were grouped under three different headings, namely:

- telephone density (teledensity): this parameter is used in the report of the ITU-T Study Group 3 Focus Group;
- classification according to GDP: this parameter is used by the Federal Communications Commission (FCC) (United States) to obtain a global estimate of the costs of international telephone service provision according to the level of development of the country in question;
- region: this parameter corresponds to the groupings used by BDT for the purposes of its regional development policies.

The number of administrations having replied is indicated for each of the above headings in the following table:

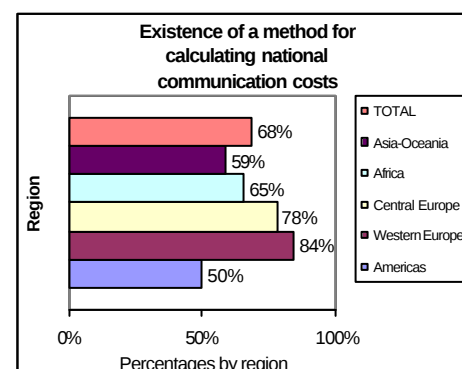
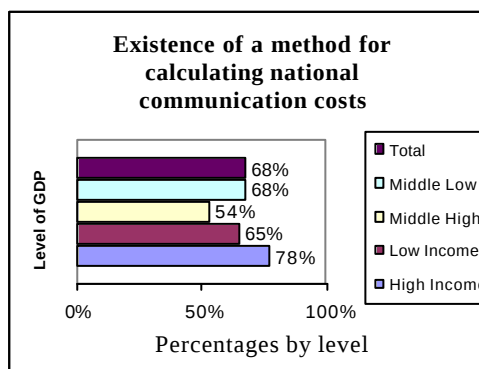
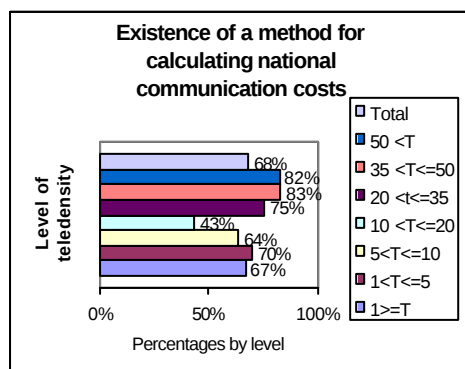
Teledensity	Countries/ administrations	Category according to GDP	Countries/ administrations	Region	Countries/ administrations
0 < T ≤ 1	18	High income	27	A	14
01 < T ≤ 5	10	Low income	26	B	25
05 < T ≤ 10	11	Middle high	13	C	9
10 < T ≤ 20	14	Middle low	22	D	23
20 < T ≤ 35	12			E	17
35 < T ≤ 50	6				
50 < T	17				

In the second stage, an in-depth analysis was made of the information provided in response to the questions on national practices. The breakdown of those replies follows under "Second stage" below.

First stage

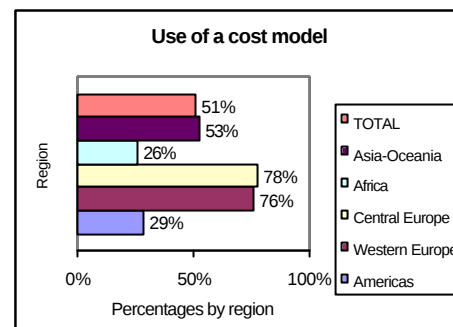
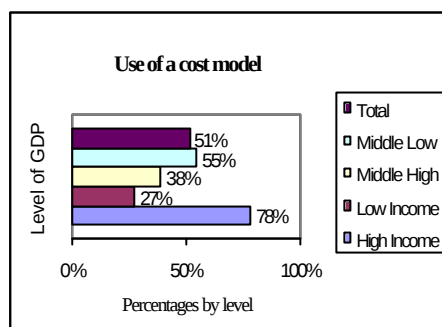
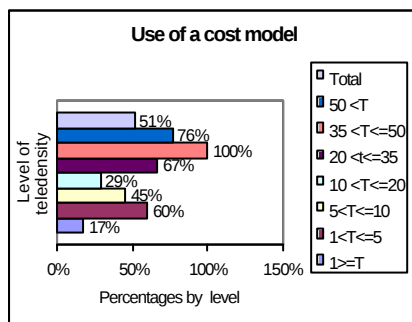
Question 1 - Existence of methods for calculating national communication costs

It emerged that the administrations of countries having both a high teledensity and high income levels (in terms of GDP) are also those which most commonly use specific methods to calculate national communication costs, as is the case in the most developed countries. The higher the teledensity, the greater the use of cost calculation methods.



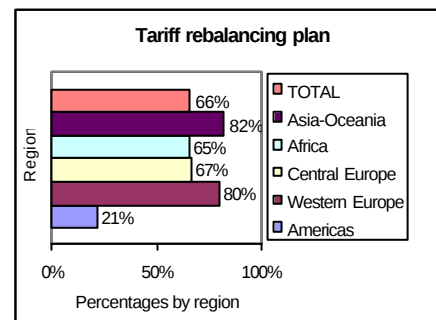
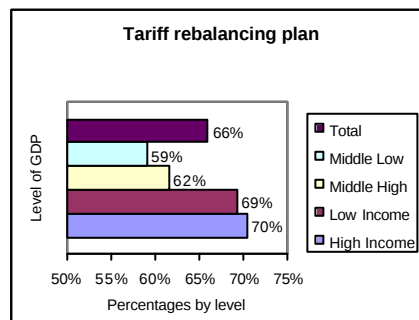
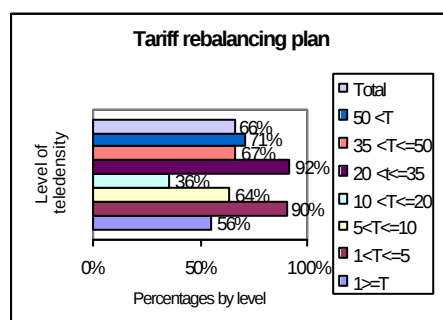
Question 2 - Use of a cost model

Of those administrations which responded to the questionnaire, only 51 per cent used a cost model and, as in the case of the previous question, it was those countries with a high teledensity that were also found to have the highest rate of use of a cost model. In the breakdown according to GDP, it is at the "high income" level that use is most commonly made of a cost model. However, a positive trend can be seen at the "middle low income" level. In the breakdown by region, it emerges that Europe is at the forefront, followed by Asia-Oceania, and that use of a cost model is more common in the Americas Region than in the Africa Region.



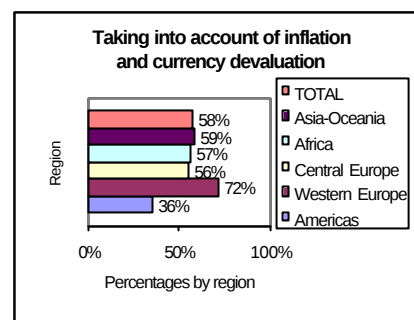
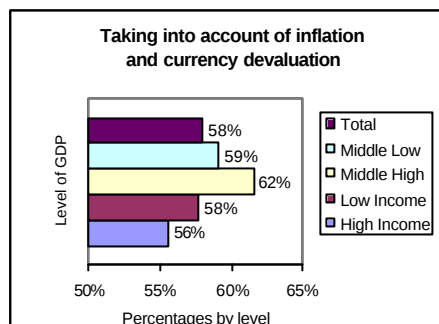
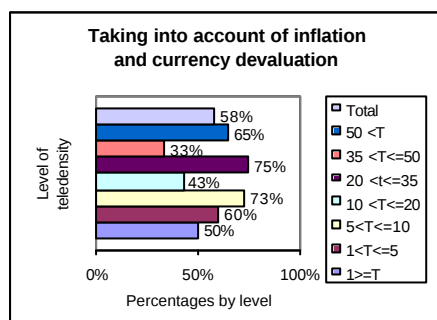
Question 3 - Existence of a plan for tariff restructuring/rebalancing in order to bring tariffs in line with costs

A very positive trend towards the adoption of tariff rebalancing can be seen for all the countries, particularly those in Asia-Oceania, although the administrations of countries having a teledensity between $10 < T \leq 20$ remain somewhat behind with respect to this type of plan, as can be seen from the breakdown by region, which shows the Latin American countries as being alone in having a low level of acceptance. Closer analysis shows this percentage to be lower in the Caribbean region, owing to the fact that most administrations in the South America region that replied to the questionnaire have carried out tariff rebalancing.



Question 4 - Taking into account of inflation and currency devaluation

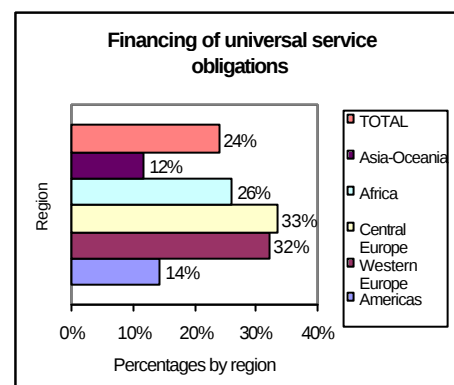
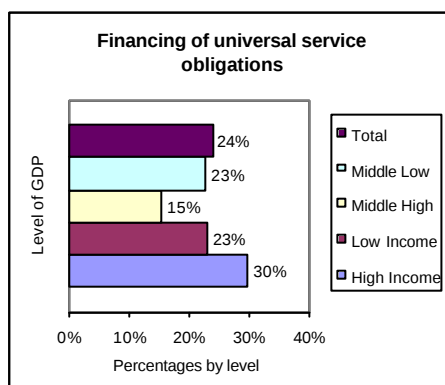
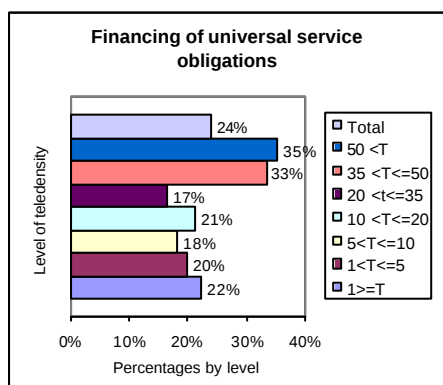
A significant 58 per cent of the total number of administrations state that they take inflation and currency devaluation into account in their calculation of costs; other than the Americas (36 per cent) and Western Europe (72 per cent), the figures for the other regions all lie in the range 56 per cent to 59 per cent. A positive trend emerges where the classification according to GDP is concerned. However, the countries of Central Europe lag slightly behind.



Question 5 - Use of universal service financing arrangements

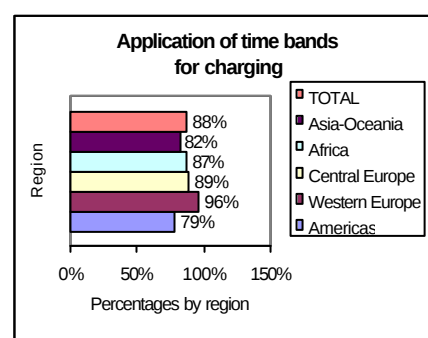
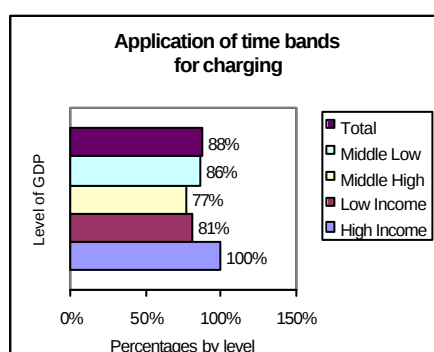
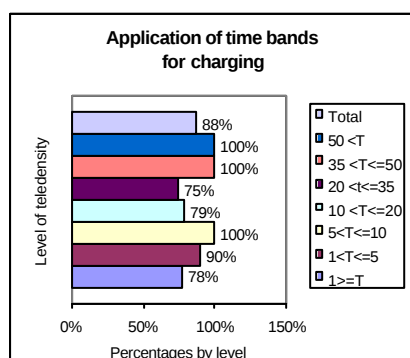
A mere 24 per cent of administrations apply universal service financing arrangements. Of these, only the ones with a high teledensity had higher percentages, which logically corresponds to the countries in the high income category under the breakdown according to GDP, i.e. those of the European Region. It is, however, noteworthy that the countries of the Africa Region are currently endeavouring to improve their situation.

In general, the percentage remains very low worldwide, although the use of such arrangements increases in parallel with the level of income expressed in terms of GDP.



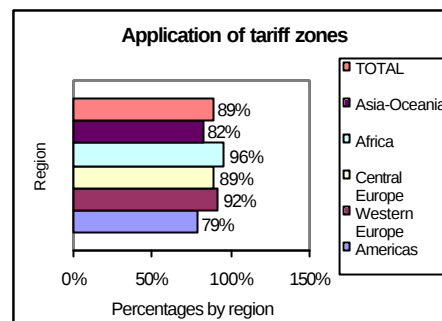
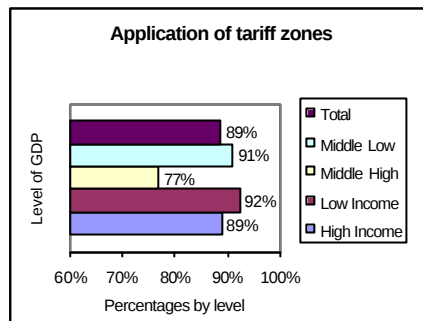
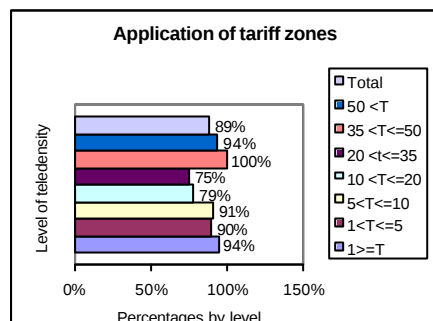
Question 6 - Practical of time bands for charging

Most administrations (88 per cent) apply the time bands for charging, the trend being very positive in the teledensity and GDP categories. Paradoxically, at regional worldwide level it is possible to observe that the Americas (79%) and Asia-Oceania (82%) are a little late in the application of time bands.



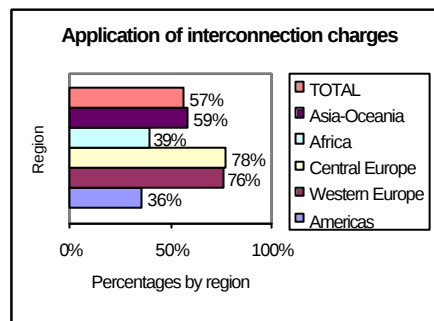
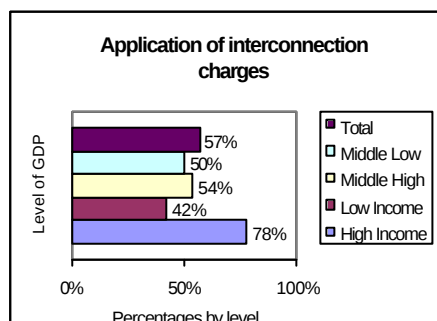
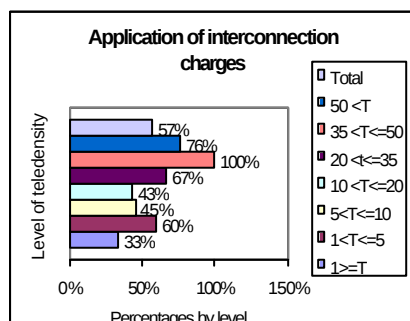
Question 7 - Existence of tariff zones

The results show that in 89 per cent of the total number of responses received, the majority of administrations use clearly defined tariff zones. In some cases, however, for example in Latin America (small Caribbean islands), there are no tariff zones owing to the size of the country.



Question 8 - Application of interconnection charges

It is the administrations with a high level of income in terms of GDP that most commonly apply interconnection charges, as is the case for the Europe Region. The other administrations show a certain stability, with the tendency being for the application of charges to increase in line with teledensity. In the breakdown by region, it is noteworthy that Africa and America have the lowest percentages, the majority of their countries being currently engaged in the process of establishing interconnection policies and costing methods. It also emerges that in some countries interconnection charges are particularly applied to cellular services and the Internet.



Second stage

Marked trends

Several marked trends emerged from analysis of the questionnaire.

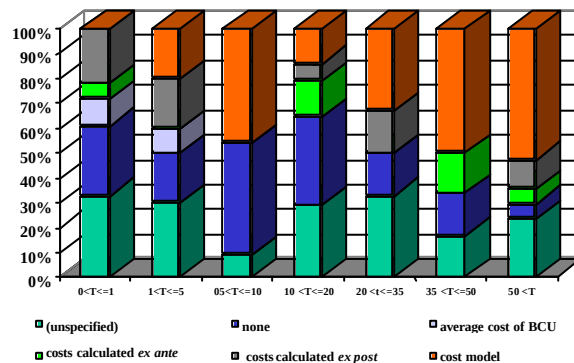
Method for calculating national communication costs

In general, the calculation of national communication costs is much less systematic in developing countries than in developed countries. A significant number of the replies received do not appear to distinguish between costs and tariffs.

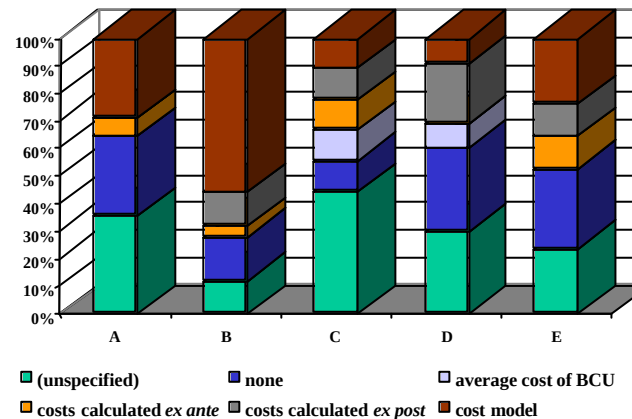
Where administrations state that they calculate costs, the proportion of them basing the process on a cost model rises in line with the country's level of development.

However, administrations of countries with a teledensity between 5 and 10 are found to be strongly in favour of using cost models.

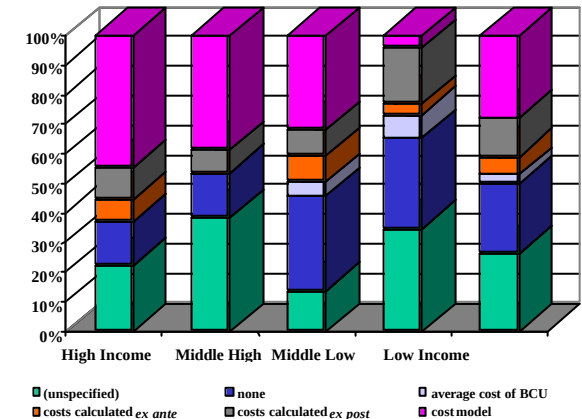
Method for calculating national communication costs



Method for calculating national communication costs



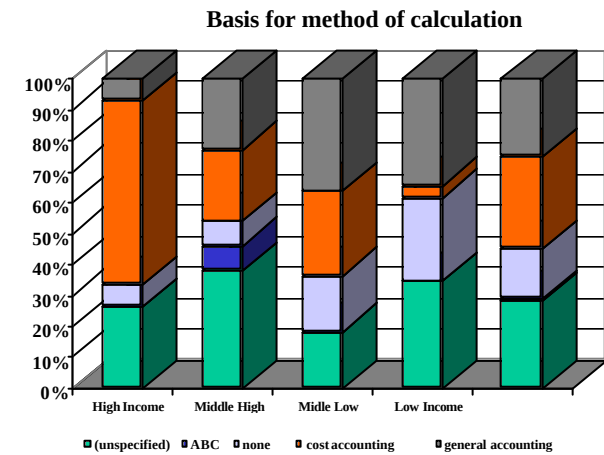
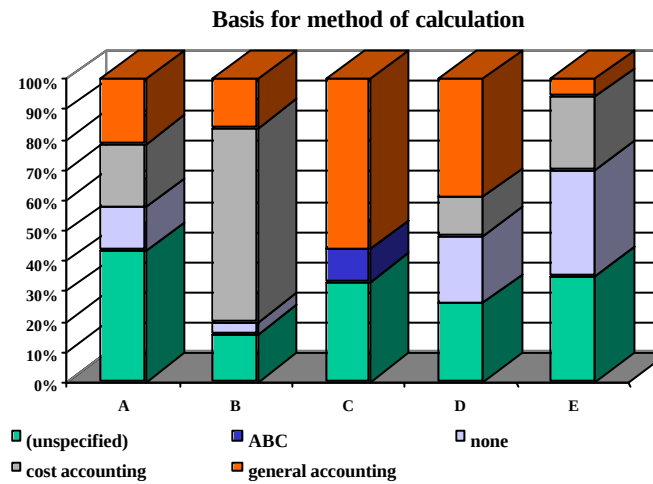
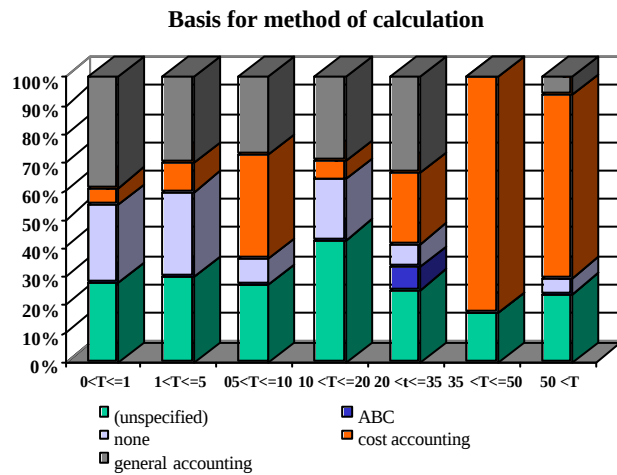
Method for calculating national communication costs



Basis for the calculation of national communication costs

More and more countries are using cost accounting data to calculate their costs; however, this trend would appear to be concomitant with the level of development of the country.

As the questionnaire was somewhat unclear on this point, the conclusions should be treated cautiously.



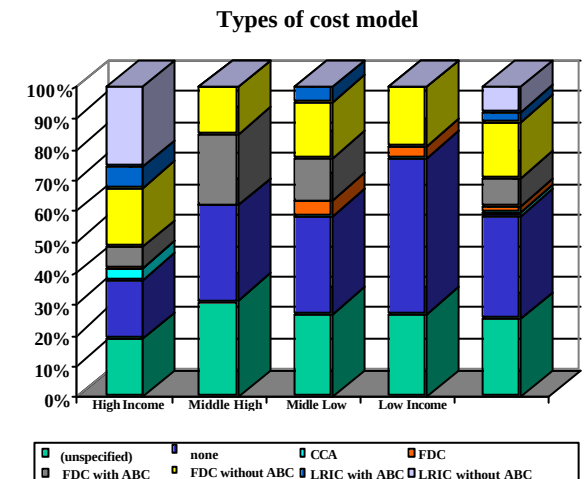
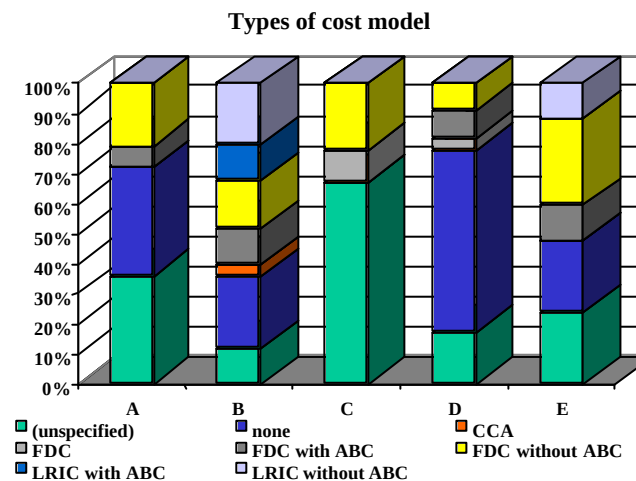
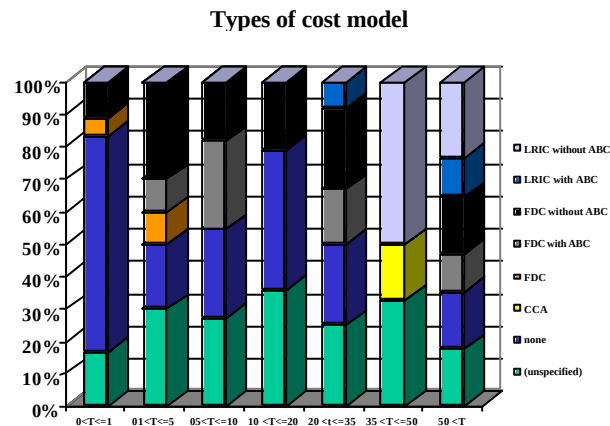
Cost models

The fully distributed costs (FDC) concept is widely used (with or without activity-based costing (ABC)), irrespective of the level of development. However, the number of administrations stating that they use the long run incremental costing (LRIC) concept increases according to the level of development.

It can also be seen that some developed countries use the current cost accounting (CCA) concept.

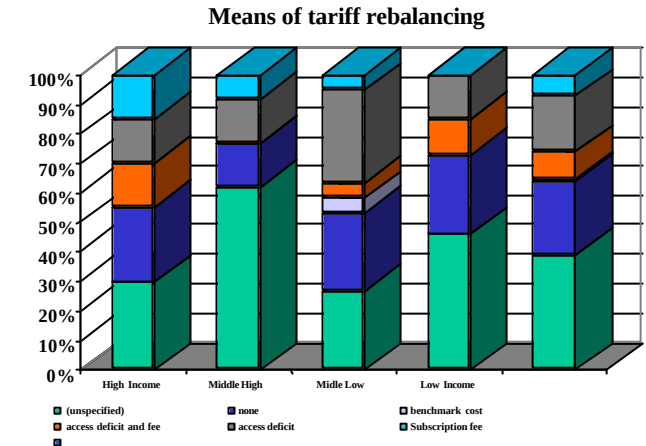
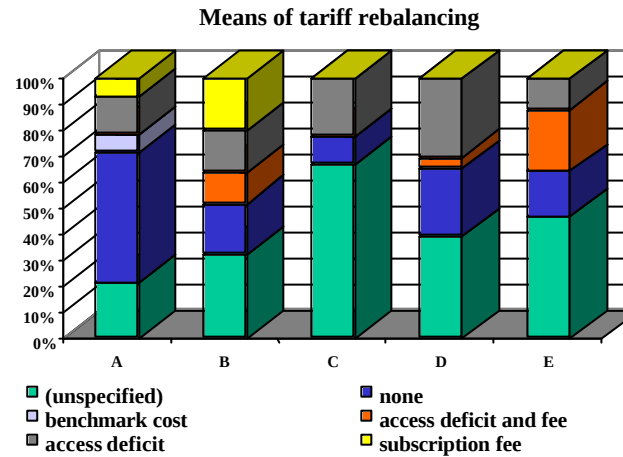
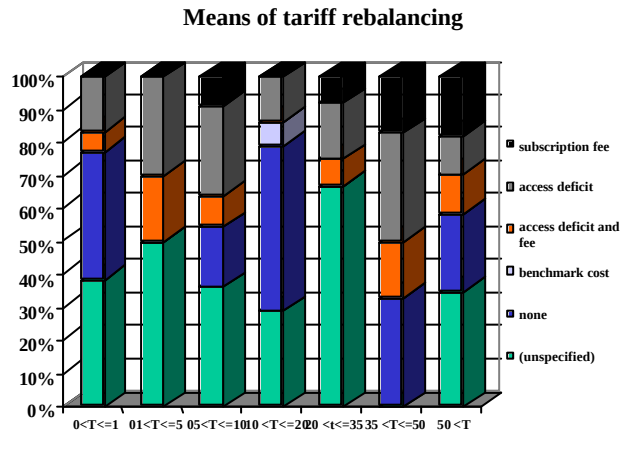
Western Europe and Asia have a considerable lead on the other regions.

For the most part, the allocation of common costs is still based on conventional methods, irrespective of the level of development.



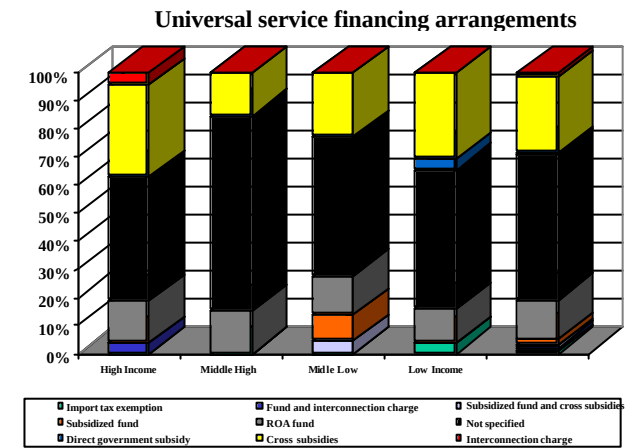
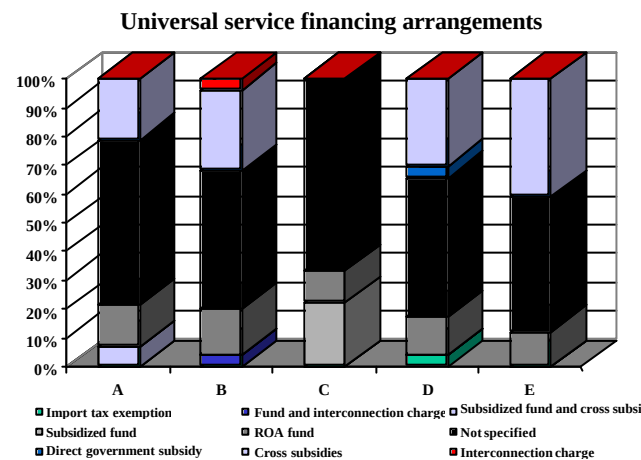
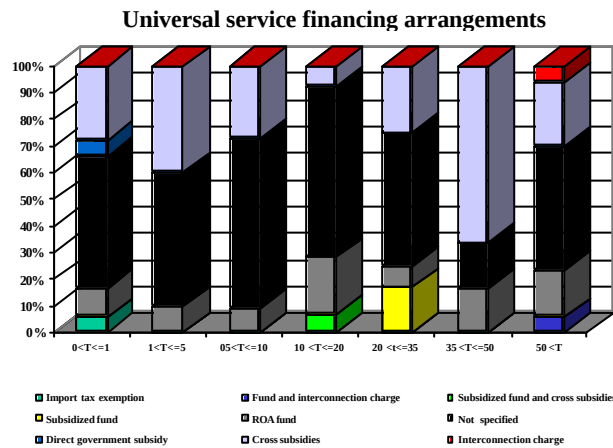
Means used for tariff rebalancing

The most widespread method used for tariff rebalancing seems to be the gradual reduction of the access deficit. In developed countries that have not yet completely rebalanced their tariffs, the level at which the monthly fee is set is the primary means of controlling the process.



Universal service financing arrangements

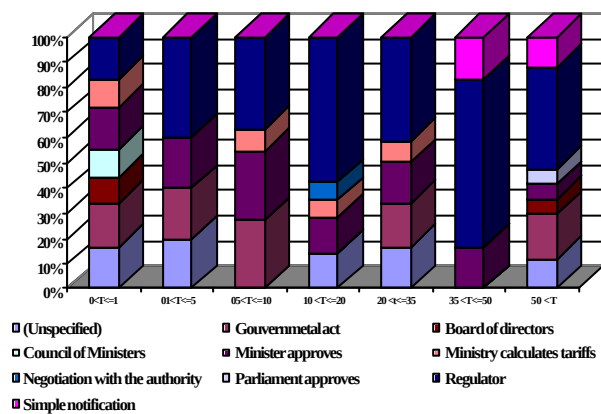
Universal service financing still appears to be a very grey area. No marked trends really emerge from the replies received, apart from the fact that the few administrations stating that they have a universal service financing policy seem to opt for cross subsidies; the establishment of a universal service fund lags far behind. Only Western Europe appears to be moving towards financing by interconnection charges, either in conjunction with a fund or otherwise.



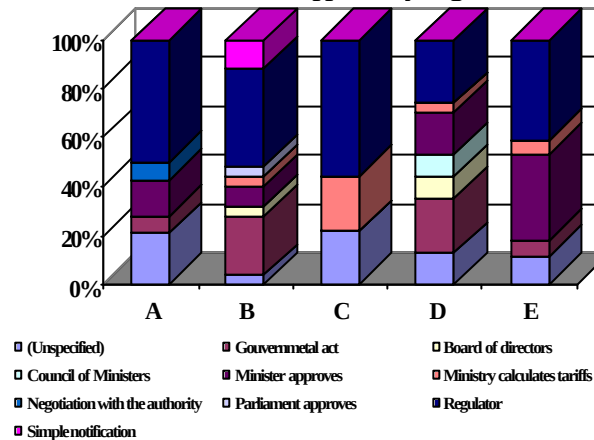
Types of process for tariff approval

The role of the regulator in the homologation of tariffs (45%) is predominant. This predominance grows with the level of development of the country. It should be noted the emergence of approval on simple notification in markets open to competition. On the other hand, the homologation of tariffs by the Supervisory Ministry (16%) and by Governmental Act (15%) remains largely practiced.

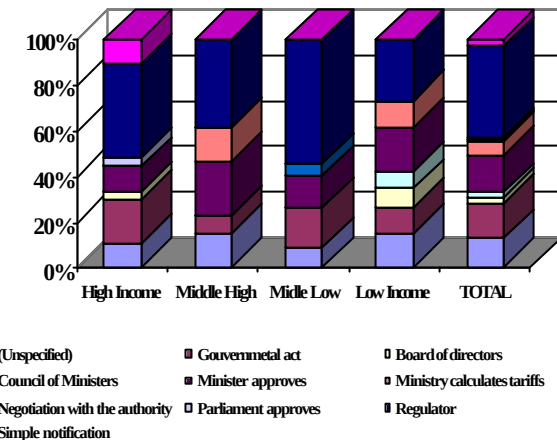
Process for tariff approval by teledensity



Process for tariff approval by Région

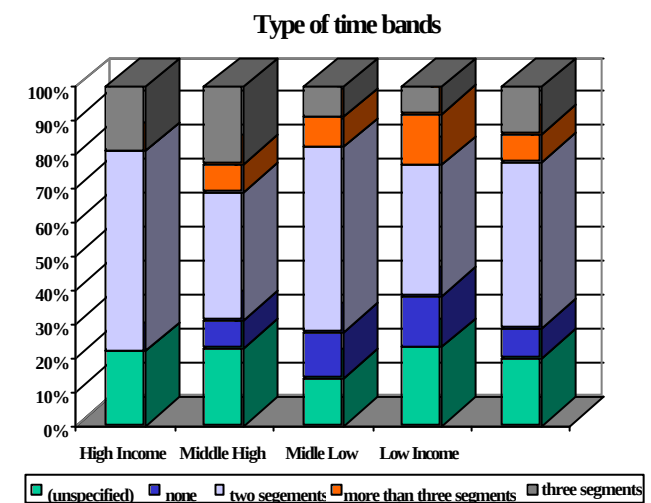
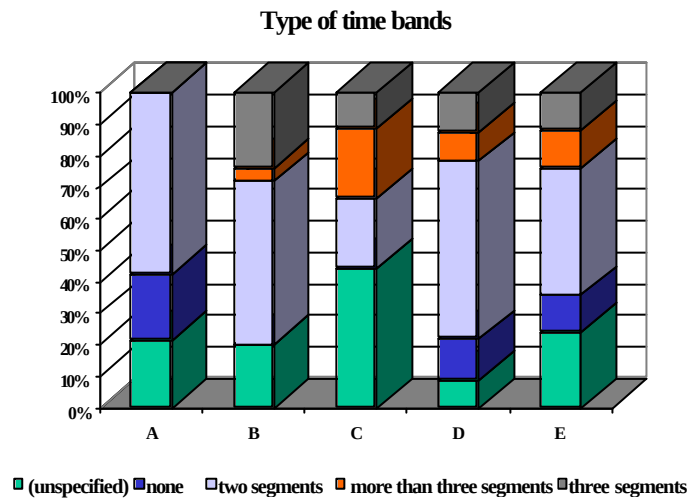
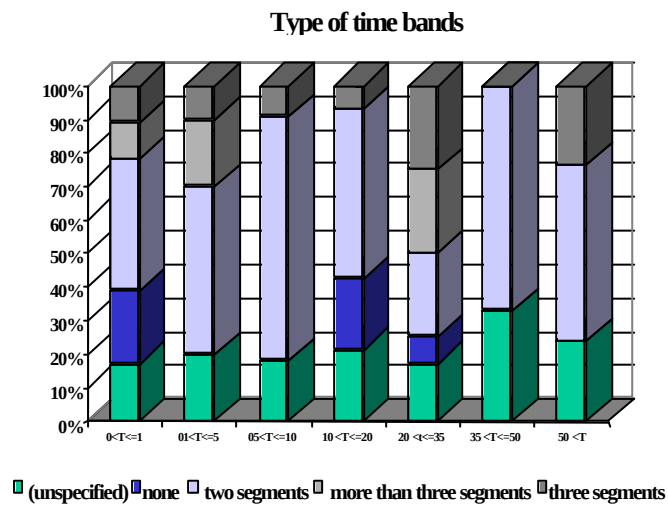


Process for tariff approval by level of GNP



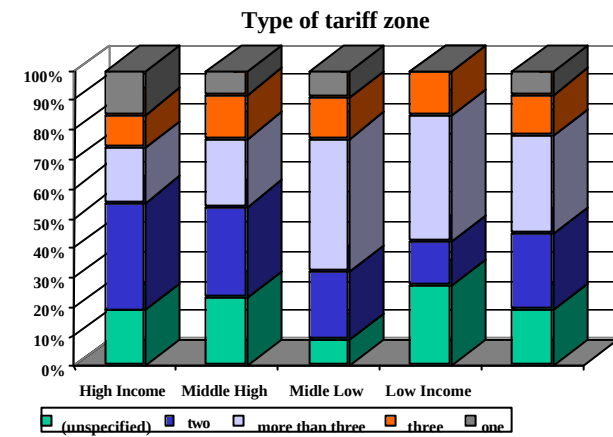
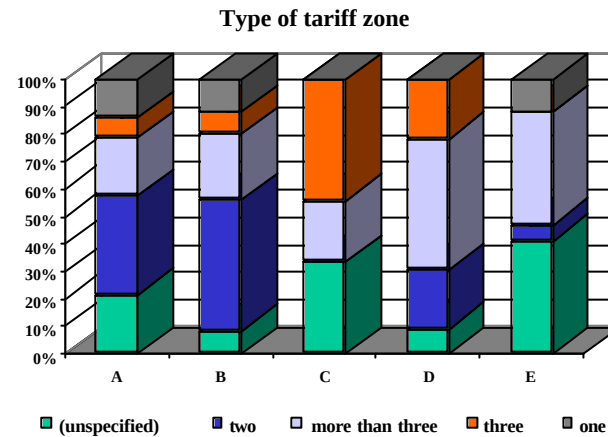
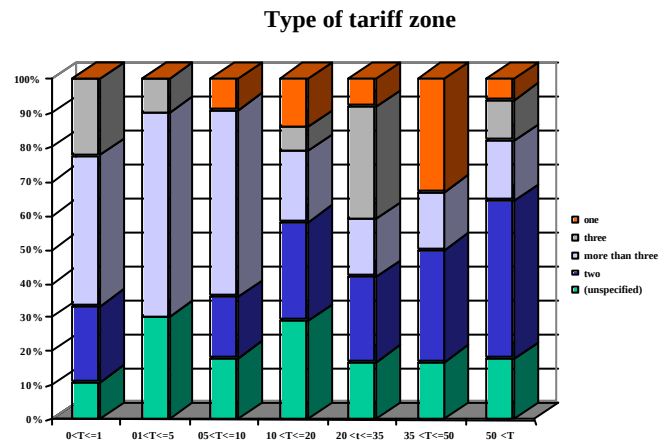
Use of time bands

There seems to be a marked tendency among administrations to apply a dual time band arrangement (day and night), although with variations in the times of the beginning and end of each period.



Use of tariff zones

There seems to be a very marked tendency among administrations to apply two tariff zones (i.e. urban and national). Differential tariffs over more than three zones are most frequent in developing countries.



Possible approaches

Study Group 1

Study Group 1 might wish to take the marked trends that emerge from this analysis as a basis for confirming or modifying the approaches taken by the Working Group on Question 12/1.

Proposed further action on the questionnaire

Comment: although the replies given by the administrations were generally satisfactory, they were not always very precise. This may be due to the different interpretations made of the questionnaire in the light of individual circumstances.

Suggestion 1: in future, a selection of the main possible responses could be provided, together with a blank space for alternative responses.

Suggestion 2: subject to availability of the necessary resources, arrangements could be made for responses to be gathered online and fed directly into a database in order to accelerate the processing and publication of the results. In that event, aspects associated with the reliability of the responses would need to be taken into consideration.

Study Group 1 might wish to decide on whether or not the distribution of a questionnaire of this kind on an annual basis would be a worthwhile exercise.

The study group might also wish to decide on the types of information to be included in the database on tariffs.

Annex 1: List of Countries/Administrations by Region

REGION	COUNTRY	ADMINISTRATION	REGION	PAYS	ADMINISTRATION
A	Netherlands Antilles	Netherlands Antilles	C	Slovakia	Slovak Telecom
A	Belize	Belize	C	Slovakia	Slovakia (MTPT)
A	Colombia	Colombia	C	Ukraine	Ukraine
A	Guyana	Guyana			
A	Cayman Islands	Cayman Islands	D	Algeria	Algeria
A	Cayman Islands	Cayman Islands (C&W)	D	Angola	Angola
A	Jamaica	Jamaica	D	Burkina Faso	Burkina Faso
A	Panama	Panama (C&W)	D	Burundi	Burundi
A	Peru	Peru (Osiptel)	D	Cameroon	Cameroon
A	Peru	Peru (Telefonica)	D	Cape Verde	Cape Verde
A	Saint Vincent and the Grenadines	Saint Vincent and the Grenadines	D	Comoros	Comoros
A	Trinidad and Tobago	Trinidad and Tobago	D	Côte d'Ivoire	Côte d'Ivoire
A	Venezuela	Venezuela (Conatel)	D	Ethiopia	Ethiopia
A	Venezuela	Venezuela (Pending)	D	Equatorial Guinea	Equatorial Guinea
			D	Mauritius	Mauritius
B	Germany	Germany	D	Malawi	Malawi
B	Austria	Austria	D	Mali	Mali
B	Austria	Austria (Telecom Austria)	D	Morocco	Morocco
B	Belgium	Belgium	D	Namibia	Namibia
B	Bosnia and Herzegovina	Bosnia and Herzegovina	D	Uganda	Uganda
B	Cyprus	Cyprus	D	Rwanda	Rwanda
B	Croatia	Croatia	D	Sudan	Sudan
B	Denmark	Denmark (NTAD)	D	South Africa	South Africa (SATRA)
B	Denmark	Denmark (Telegreenland)	D	Swaziland	Swaziland
B	Estonia	Estonia	D	Tanzania	Tanzania
B	France	France (France Télécom)	D	Chad	Chad
B	France	France (French Polynesia)	D	Togo	Togo
B	Greece	Greece			
B	Hungary	Hungary	E	Bahrain	Bahrain
B	Latvia	Latvia	E	Cambodia	Cambodia
B	Luxembourg	Luxembourg	E	India	India
B	Malta	Malta	E	Indonesia	Indonesia (BCC)
B	Monaco	Monaco	E	Indonesia	Indonesia (DGPT)
B	Norway	Norway	E	Israel	Israel
B	Portugal	Portugal	E	Kuwait	Kuwait
B	United Kingdom	United Kingdom (BT)	E	Malaysia	Malaysia
B	United Kingdom	United Kingdom (OFTEL)	E	Maldives	Maldives
B	Slovenia	Slovenia	E	Mongolia	Mongolia
B	Sweden	Sweden	E	Myanmar	Myanmar
B	Switzerland	Switzerland	E	Oman	Oman
			E	Singapore	Singapore
C	Albania	Albania	E	Thailand	Thailand
C	Azerbaijan	Azerbaijan	E	Turkey	Turkey
C	Bulgaria	Bulgaria (BTC)	E	Viet Nam	Viet Nam
C	Bulgaria	Bulgaria (CPT)	E	Yemen	Yemen
C	Kazakstan	Kazakstan			
C	Poland	Poland			