Seminar on the economic and financial aspects of telecommunications for the Study Group 3 Regional Group for Latin America and Caribbean (SG3RG-LAC)

Lima (Peru), 23 and 24 June 2009

FINAL REPORT OF THE SEMINAR

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1 Introduction

Within the framework of the implementation of BDT's Doha Action Plan (DAP), specifically Programme 4 "Economics and finance, including costs and tariffs", and in close coordination with the Study Group 3 Regional Group for Latin America and Caribbean (SG3RG-LAC), the Regional Seminar on the economic and financial aspects of telecommunications was held in Lima (Peru) at the kind invitation of OSIPTEL, followed by the regional meeting of SG3RG-LAC. The two events were attended by 48 delegates from ten countries of Latin America and the Caribbean.

Attending the opening session was Mr Alejandro Jiménez, General Manager of OSIPTEL, who warmly welcomed all the delegates and encouraged them to exchange experiences. He informed the meeting that OSIPTEL would be sharing and participating actively both in the seminar, through a series of presentations, and in the meeting of the LAC group. Expressing satisfaction that the subject of international roaming was to be discussed during the event, he noted that Peru would be leading the work for South America.

Ms Carmen Prado-Wagner, representing ITU, welcomed participants on behalf of the ITU leadership, expressed thanks for the considerable support provided by OSIPTEL for the holding of the seminar and LAC Group meeting, and explained the contents of the programme of work.

Mr Facundo Fernández Begni, President of the LAC Group, expressed gratitude to the organizers of the two important events and urged participants to work together on developing common approaches for the region which could subsequently be taken up in Study Group 3 in particular and ITU in general. The chairmen for the seminar were Mr Alejandro Jiménez and Mr Alejandro Moscol.

2 Results

The Seminar on the economic and financial aspects of telecommunications was divided into three sessions, the first on international roaming within the region, the second on tariff regulation and cost calculation, and the third on matters of interest to the region. The agenda was drawn up in coordination with the LAC Group management team and OSIPTEL, the subjects discussed being related to the activities and objectives of Programme 4 "Economics and finance, including costs and tariffs". The following is a brief summary of the results of each session.

Roaming in South America – background and priorities

The different types of roaming, i.e. as used by business travellers, tourists and those living in border areas, were explained. The argument frequently heard from operators is that roaming is expensive on account of the relatively low level of mobility within the countries; in other words, that telecommunication traffic generated by tourism and business travellers is of little relevance. One of the solutions with respect to this argument is to identify routes that are

characterized by a higher and more frequent level of mobility and introduce special prices whose low level could serve to increase the volume of traffic. Among other things, attention was focused on tax aspects, since the roaming service can give rise to double taxation, i.e. both in the country of call origin and in the country in which the customer is invoiced.

The Working Group in charge of the economic aspects of telecommunication (GTEII) discussed tariffs and taxation, including transparency, double taxation and the analysis of price structures. The meeting was presented with a number of possible solutions for fostering roaming within the region, one idea being that the welcome message transmitted to travellers should include an indication of the per-minute roaming charges. Technical aspects, fraud and regulation were also discussed. It was remarked that border agreements are very important and that efforts should be made to achieve harmonization throughout the region.

In relation to this subject, and bearing in mind the matters dealt with during the seminar on roaming held within the framework of the Permanent Consultative Committee I (PCC.I) meeting in Cusco this year, participants discussed the need to take account of the work of institutions such as AHCIET (operators) within the working group made up of CITEL (administrations) and REGULATEL (regulators), with a view to elaboration of the future inter-American treaty dealing, among other things, with the issue of multiple taxation in respect of international mobile roaming.

Mobile termination rate regulation and calculation methodologies in LAC

A number of cases were presented with regard to what European countries are doing in the area of mobile termination rates. Trends in the evolution of mobile termination cost modelling were also presented, since increasing competition leads to a broadening in the evolution of the range of cost models used, it being noted that the models most frequently used are those based on current costs (LRIC), followed by models based on fully allocated costs with current costs and historical costs and, lastly, by the setting of a tariff ceiling.

A number of delegates provided information on the methodologies used in their countries. It was recommended that account be taken of Recommendation E.99, in which it is stated that mobile network termination rates could be the same as fixed network termination rates.

Tariff regulation experience in Peru

This contribution demonstrated very clearly and precisely how OSIPTEL applies tariff regulation based on price capping. It basically showed the relationship between inflation and determination of the productivity factor X. Also explained was the regulation of tariffs for calls from public telephones to mobiles, since public telephones continue to represent the means of access to telephony for some 30 per cent of households throughout Peru. The rapid growth in mobile penetration significantly increases the probability of calls (local and long-distance) being made from public telephones to mobiles. The conclusion was reached that it is important to use the productivity factor as an incentive for operators to reduce their costs through efficiency gains, the objective being to translate those gains into cost reductions for users.

ITU-D's strategy on cost and tariff issues

In this presentation, participants were informed about the results of the survey on users of the COSITU model worldwide which was distributed to all the members of ITU-T Study Group 3 for the purpose of finding out who was using the model and what they thought about it. For America, only eight responses were received, out of which only four administrations said that they used COSITU. Among those countries are the countries of Central America, which first used the model and then carried out a BDT project to determine international interconnection rates in the region in coordination with COMTELCA. From the aforementioned data, and above all on the basis of current trends with respect to the use of cost models, it can be seen that, although various cost models other than COSITU are available – either free of charge or at low cost – from other international institutions (for example, the World Bank or European Union models), very few of them are being used by administrations. The main reason for this lies in the legal challenges faced by regulators from operators.

This being the case, and following lengthy discussions – within BDT, with the other ITU Sectors, with COSITU experts and with other experts, and as well as, of course, with the Member States through the BDT study groups – on the economic and financial aspects of telecommunications, it was decided to release the COSITU source code and make it available to the regulatory authorities and ITU Member States currently using this model, to enable them to tailor it to their own national circumstances.

BDT is currently working towards publication of the COSITU source code on a passwordprotected website on which the software files and technical data will be made available. This website will be available solely to regulators and regional organizations interested in using the source code to create a new version of COSITU adapted to their own environment. Furthermore if, for example, a regulator or regional organization develops a new version of the software, it will be able to make it available to other interested regulators via the same platform. In addition, a discussion forum is foreseen to facilitate communication between users of the system. BDT will focus its activities in this regard on training, with courses on telecommunication service cost modelling and regulatory accounting within the region to be organized in coordination with the region's centres of excellence.

Regional experiences

The experiences of four different countries were presented:

- 1. Peru Charge regulation for essential facilities
- 2. Brazil Methodology for assessing the cost of capital for the telecommunication sector
- 3. Cuba Regulatory aspects of charge calculation for services in Cuba
- 4. Peru WACC calculation methodologies for telecommunications

Status of mobile number portability within the region

In this presentation, a comparison was made between the proportion of mobile numbers ported by mobile subscribers in different countries of the world, particularly developed countries.

In Latin America, the countries having already implemented portability include Ecuador, Brazil, Panama, Peru, Chile and Colombia.

One of the key focuses of discussion was the case of Brazil, where, since a large part of the market is prepaid, it is difficult for customers to have access to portability. The importance of educating users on the use of number portability was noted.

There was an opportunity to share in the experiences of Brazil, Peru and Ecuador in regard to the process of implementing number portability, including discussion on the costs to be borne by the operator in adapting its networks and installing network facilities for all its platforms, as well as on the database development and management costs that are normally passed on to the user. These costs should not be very high since the user should not be penalized.

Recommendations ITU-T E.190 and E.164 address the matter of users' rights in the use of number portability.

Implementation of number portability in Peru

Peru is implementing number portability, having opted for the All Call Query system. This process includes adaptation of the tariffs, regulations and technology applications. The project was organized in three phases: first, selection of the technical solution; second, determination of the technical specifications and implementation plan; and third, implementation and testing. The system is expected to be in operation by March 2010. Portability will not result in any increase in the service prices charged to the consumer. The presentation looked at general considerations regarding the regulation of number portability, interconnection issues, supervision aspects, payment and tariff management and database administration. One important point is that per-transaction payments are expected to cover the costs associated with the implementation, operation and maintenance of the database.

Telephony cooperatives in Argentina

Following a general overview of the telecommunication situation in Argentina, details were given of the contrast between rural and urban areas, which has given rise to the development of cooperative projects in response to the lack of public service provision which tends to prevail in small urban areas. A total of 289 groundbreaking cooperatives have thus far been set up in Argentina. Their social significance lies in the fact that they provide support to educational projects and are very public-oriented.

The President of the LAC Group observed that, bearing in mind the number of rural and isolated areas without a telecommunication service, BDT could assist with studying the possibility of implementing cooperatives within the region, taking the case of Argentina as a pilot study. BDT suggested that a small survey be conducted to determine the level of interest among the countries before launching such a project, which was very interesting and could benefit communities in rural areas.

Application of statistics in the telecommunication sphere - net cash flow sensitivity analysis, financial statements, maximum potential losses

This presentation described the application to the various telecommunication services of different quantitative and economic methods. Practical examples were given, including results that may be useful in the decision-making process.

Consumer surplus from the viewpoint of the telecommunication operator

Consumer surplus describes a situation where the consumer receives a benefit or value in excess of the price paid, this being represented by the area lying below the demand curve and above the price. Operator surplus, on the other hand, refers to the total benefit or income received by operators when they sell a service at a level above its cost. These surpluses can be used to determine the impact on well-being of regulator intervention in the market, on the basis of the gains or losses experienced by the consumer and the operator. In this context, the aim of the regulator should be to achieve user well-being in the interests of having a competitive and efficient market. A theoretical framework was presented, together with examples of how to apply this theory in the telecommunication environment.

Approach of CITEL's Permanent Consultative Committee I (PCC.I) to the economic aspects of telecommunications - Coordination of the PCC.I-CITEL / Study Group 3 – LAC ITU activities

The presentation began with an explanation of how CITEL is organized and the three pillars on which it is based, namely collaboration and coordination with regional and international telecommunication entities and financial institutions; activities aimed at fostering development, training, promotion and the establishment of priorities.

The purpose of CITEL is to facilitate and foster the ongoing development of telecommunications within the region. Within its organizational structure is the rapporteur group dealing with the economic aspects of telecommunications (PCC.I). Its objectives are: "coordination of standards for telecommunication networks and services with the aim of achieving the interoperability of such networks and services within the region, policy and regulatory matters arising as a result of the rapid evolution of telecommunications, and initiatives for the introduction of technologies and services, including MRAs, conformity assessment procedures and tariff issues". PCC.I does not have its own funds for developing or implementing projects, which is why it is seeking to work in coordination with ITU-BDT, as well as with Study Group 3 and other regional entities and development banks.

The presentation also looked at the dynamics and activities of PCC.I and its linkage with BDT's activities.

3 Follow-up of regional activities by ITU-BDT and closure

Within the framework of the discussions, the participants thanked BDT for having organized the seminar and suggested a number of topics of interest to the region which could possibly be considered for inclusion on the agenda of the following year's seminar, namely: mobile and fixed roaming; number portability (mobile and fixed); cooperatives; VoIP and its possible impact for regulators and operators; interconnection and access to next-generation networks (NGN), including an analysis of links, tariff-setting and capacity-based calculations; migration to IP networks; IPV6; and continuing consideration of other countries' experiences for the purpose of exchanging knowledge, including with developed countries.

In the concluding phase of the seminar, Mr Alejandro Moscol, Chairman, briefly summarized the various topics brought up and discussed. He also thanked the participants, and expressed gratitude to BDT for having organized the seminar, which had addressed matters of considerable interest to the region.

The President of the LAC Group informed participants of the excellent collaboration that existed with BDT, examples of which were the organization of training workshops on regulatory accounting and cost modelling, to be held in Argentina in September 2009, and elaboration of the Guide on cost models.

All of the presentations and outcomes, as well as the list of participants, may be found at: <u>www.itu.int/ITU-D/finance</u>.

SG3RG-LAC discussions relating to Programme 4 "Economics and finance, including costs and tariffs" activities:

- 1. In regard to the examination and application of cost models in the region, "the Group observed that BDT intends to make available the source code for the COSITU model, as well as to organize training sessions in the region on the cost methodology in general, and specific cost models, including COSITU, in particular".
- 2. Paraguay requested clarification in regard to the availability of the COSITU source code for universities, which were the entities best placed to work on the development side. BDT needed to check that aspect, but saw the idea as a positive one subject to the regulator being prepared to support the participation of such entities. The confirmation would be sent direct to the representative of Paraguay.
- 3. Information on cost models applied by administrations: "El Salvador observed that although individual operators each had their own cost model, the regulator should have an overall model. For the time being, COSITU was being used. Peru pointed out that cost models were made up of complex components and that certain modules would need to be kept separate, particularly for reasons of confidentiality in order to facilitate the exchange of information. To that end, existing and new cost models should identify those components that could be made public and those that were confidential in nature".
- 4. The LAC Group took note of the presentation on "Roaming in South America: background and priorities", discussed during the BDT seminar. It was agreed to submit that presentation to SG3 as a contribution from SGRG-LAC. The Chairman observed that CITEL's PCC.I had a study topic on mobile roaming. It was agreed to work jointly with CITEL on that subject, with the Chairman being entrusted with setting up the link with CITEL". Also to be presented was a contribution from the LAC Group on inter-American activities on international roaming, including coordination with the various regional entities and the projects that ITU-BDT would be carrying out in the region.
- 5. Topics to be addressed within the framework of the future programme of work:
 - a. Tariff-related and economic consequences of convergence (Paraguay);
 - b. Mobile-service roaming in Latin America and the Caribbean (Peru and Colombia);
 - c. Telecommunication service cost models for next-generation networks, including COSITU (El Salvador and Ecuador);

- d. Practical application of economic and statistical models within the telecommunication context (Costa Rica);
- e. Impact of participation in the telecommunication market of cooperatives and SMEs, and securing financing for the implementation of cooperatives and SMEs (Argentina, Bolivia);
- f. Review of the International Telecommunication Regulations.
- 6. The outcomes of this work will be summarized in the report of the LAC Group meeting, Document TD2 (PLEN/LAC).