



*Regional Seminar on Costs and Tariffs for Member Countries of
the Regional Group for Africa (SG3RG-AFR)*

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FINAL REPORT ON THE SEMINAR

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1. Introduction

The Seminar on Costs and Tariffs for Member Countries of the Study Group 3 Regional Group for Africa (SG3RG-AFR) was organised in conjunction with the Instituto Nacional de Comunicações de Moçambique (INCM) and started on 4 May, 2009. Sixty-one delegates from 23 countries participated.

The seminar was opened by Mr Modibo Traore, SG3RG-AFR Chairman, Mr Isidoro Pedro Da Silva, Chairman of the Board of INCM, and Ms Asenath Mpatwa representing ITU. The Chairmen of the seminar were Mr. Francisco Chate and Mr. Arlindo Zandamela from INCM.

2. Results

The agenda comprised subjects requested during the TAF Group seminar and meeting, held in Djibouti in 2008, specifically on broadband and universal access in the region, regulatory policies and financial aspects. Discussions focussed on BDT activities, specifically Programme 4 (Economics and Finance including cost and tariffs) on the basis of the priorities of the region.

Session 1: Network Externalities (NE)

Two presentations were made on Network Externalities (NE), the first focused on the development of the ITU-T discussion concerning telecommunications NE, and the second concerned the situation of the application of NE in developing countries. The presentations described the NE concept, the positive and negative effects of NE, the convergence of telecommunication services, the economic impact and the mechanism regarding the harmonization of the NE world-wide as well as the development of Annex 1 to Recommendation D.156 on network externalities.

Discussion focused on the work carried out in other countries on this issue, specifically developed countries. However, until now, studies on mobile termination rates have only been carried out in the United Kingdom and the possibility of implementing NE and evaluating the impact in developing countries have not yet been studied in detail. During the discussions, it was agreed to create a working group that would prepare models or formulas, as appropriate, in order to calculate the levels of a network externality premium. This will be presented as part of the SG3RG-AFR contribution during the Study Group 3 meeting to be held in Uganda in September 2009.

Session 2: International bandwidth and their different usages

This presentation included the present situation of bandwidth management, the pricing process and regulation in the region. International bandwidth was presented as the maximum volume of data transmitted from a country to the rest of the world. At the moment, international bandwidth is mainly used to convey Internet traffic, data services and for mobility.

Important connection projects, notably the installation of sub-marine cables, have been launched in Africa and will help introduce competition in access to sub-marine cables.

Competition in international connectivity and access to the international and Internet gateways is very important in order to reduce the cost of bandwidth and broadband prices for consumers.

Session 3: ITU Activities in the region

A presentation of the organization of the Telecommunication Development Bureau (BDT) of the International Telecommunication Union (ITU) was given. The presentation outlined the different activities being undertaken, as well as the strategy for the implementation of the Operational Plan in accordance with the BDT mandate, and the regional initiatives were highlighted. This included a review of the ITU-D global agenda for the Africa region.

Session 4: ITU work on Broadband

This presentation described the link between universal access and broadband. It focused on regulatory incentives to promote broadband and to enable universal access by presenting best practice guidelines for the promotion of low cost broadband, resulting from the Global Symposium of Regulators 2004.

The discussion focused on the work that BDT is doing in this area as well as the importance of the role mobile telephony in universal access. Participants noted the importance of studying the broadband situation in Africa as well as the impact of usage of this technology on the cost of telecommunication services. These studies should take into consideration the steps needed to prepare both market and feasibility analysis for implementation of broadband in rural areas. A study on a broadband wireless network project and on IP telephony were also presented.

Session 5: Broadband and universal access in the region, regulatory policies and financial issues

This session was divided in two parts; the first part was a presentation of an overview on broadband. It considered technical aspects, regulatory policies and financial issues. The second part was a discussion on the broadband and universal access experiences in African countries.

Discussions focused in the determination of the best strategy for African countries to decrease the cost of implementation of broadband to make it affordable to users. Consideration of the cost-benefit relation is very important for operators before investing in rural and isolated areas. Fortunately, problems linked to international connectivity could be solved with the sub-marine cable projects launched in Africa.

During the discussion participants gave details of the current situation in their countries. Most of them are in the process of implementing broadband through either fixed or mobile networks. However, as far as regulation is concerned, most do not yet have a regulatory framework in place for this type of service. Several countries mentioned that they are regulating quality of service and spectrum management. It was suggested that infrastructure sharing should also be promoted by regulatory authorities in order to reduce costs by taking advantage of economies of scale. The issue of access to land-locked countries was also raised, and it was proposed that countries should collaborate to identify a regional solution. Some questions remained unanswered: How can regulatory authorities regulate broadband? How to determine the price of broadband services in order to regulate them? How can regulatory authorities obtain cost data from operators?

Session 6: Strategy of ITU-D cost modeling

During the presentation on ITU-D strategy on cost modeling, it was noted that most African countries do not use the COSITU model (underlined by the results of the survey on the usage of this model) and neither do they have a specific cost model for the calculation of certain telecommunication tariffs, specifically SMS, MMS, and roaming. Some of the key facts presented and discussed during this session included the following:

- While there are several other no-cost or low-cost models available from a range of development banks and other entities (for instance, the World Bank model, the European Union model) in addition to COSITU, few of these models are ever used by regulators. The reason is primarily due to legal challenges raised by regulated companies.
- Many regulatory authorities have preferred to hire consultants to develop tailor-made cost model products. Not only do such models better meet the needs of the country, but the consultants' terms of reference also require the consultants to defend the cost model results against legal challenges.
- Tailor-made cost models are relatively expensive, well beyond the resources of ITU.
- ITU, given its mandate, membership and resources, is not equipped to provide legal support for its cost model or to calculate tariffs that can be treated as "ITU approved tariffs."

- In this sense, and after long discussions in ITU with COSITU experts, cost experts and ITU Member States throughout the ITU-D Study Groups, it was decided to release the code source of COSITU to make it available to regulatory authorities so that ITU Member States currently using this cost model can adapt it to their national circumstances.
- At present, ITU-D is working on a project to publish (through a protected website) all the software files and materials. This website will only be available to regulatory authorities and regional organizations, and this will be enforced with a password and username system. In addition, if regulators that are currently using this cost model develop a new version, it will be possible to share it with all regulators that are interested.
- ITU-D has also developed the terms of reference as well as the technical description for upgrading COSITU and these will also be available, on condition that the new version will be shared with or open to all the regulators interested.
- In this sense, ITU-D's work in cost calculation is best equipped to assist Members to build cost-calculation capacity so that regulators and policy makers can make their own cost calculations, based on their own cost strategy through an in-depth training course on cost model development addressed to experts on costing from NRAs.
- BDT is also working in the development of guidelines on cost modeling that will soon be available with the ICT Regulation Toolkit (*Module 2. Competition and price regulation*).
- Some of the delegates presented the situation in their countries, and the problems encountered regarding the calculation of cost-based tariffs.
- The Centres of Excellence will continue to provide training and direct assistance for the Africa region on cost modeling and with COSITU. In coordination with the ESMT and Afralti, ITU-D will organise two expert-level training sessions for national regulatory authorities on cost model development, to be held for English-speaking countries in Lesotho (July 2009) and for French-speaking countries in Senegal (December 2009).
- During the SG3RG-AFR meeting, countries reported that significant changes had occurred in their environments following the implementation of the model, with the consequence that the model could no longer be used in its present state; however, the model could be used in the future if it were updated, for example, to implement the long-run incremental cost model (LRIC).
- The usefulness of the ICTeye, the T-REG and the ICT regulation toolkit was also noted.

Session 7: Regulatory and financial aspects of telecommunication services

This presentation was focused on retail and wholesale tariff regulation taking into account the calculation and implementation of tariffs as well as the different methodologies. The regulation of retail tariffs for end-users and wholesale interconnection and access was discussed, taking in to account call termination and origination rates between operators. The challenges for the calculation of wholesale services in Next-Generation Networks was also presented, raising the issue that the regulator may use regulation to create incentives to increase competition using replicable elements. The calculation of the cost of capital is becoming more complex due to the present global financial crisis. This is due to the use of the evolution of the rate of return on capital which is based on the international market of the telecommunication sector.

Case studies from Bangladesh, Malaysia, Morocco and Kenya were discussed. Participants expressed their concern regarding the global financial crisis and how regulators could develop a sound strategy to cope with it. Fortunately, the telecom sector is more stable than other sectors, and although the growth of telecommunications is still increasing in all regions, managing the situation remains a daunting challenge for both regulators and operators.

Another point was raised about the segmentation of services and the different ways operators are pricing services for different segments of the population. This should be carefully observed by regulators.

Session 8: Afralti Harmonization of NRA on cost modeling and tariffs for increased ICT penetration for economic development in SADC

The objective of this presentation was to propose a sub-regional initiative concerning the Southern African Development Community (SADC) countries to harmonize the cost calculation methodologies and calculation techniques. SADC through the Communications Regulators' Association of Southern Africa CRASA has been formulating best practice guidelines on regulation to enhance capacity to deliver for Member States. It was

recommended by the panel to carry out a survey asking countries which type of assistance is needed on costing issues in order to clearly define the terms of reference for this initiative.

Session 9: Impact of using one monetary unit in international exchange

All the activities regarding international telecommunications exchanges are governed by the International Telecommunication Regulations (ITRs). This stipulates that in the absence of agreements between operators and/or service providers, the currency unit used for the payment of the distribution rates for international services should be the Special Drawing Rights (SDR) from the International Monetary Fund (IMF) or the Franc Gold. But most of the operators, especially the ones dealing with VoIP are not respecting this regulation and are effecting the international payments in their local currency (generally USD), and this affects the revenue of the counterpart African operators.

It is recommended that regulatory authorities observe these procedures and try to find solutions at national and regional levels to avoid loss of revenue on these exchanges.

Session 10: Results of BDT work on Question 12-2/1 - Tariff policies, tariffs models and methods of determining the costs of services on national telecommunication networks, including NGNs

The draft final report on Question 12-2/1 from the ITU-D Study Group 1 was presented. This report covered the following requirements: 1) pursue all work on cost models and continue work on the regulation of dominance undertaken during the period 2002-2006; 2) study the financial and tariff implications of site sharing for terrestrial mobile services; 3) study the economics of NGN investment projects of telecommunication operators; and finally 4) study the cost models used in setting tariffs for new services offered on NGNs.

It was suggested to revise the part on site sharing. This should be treated as infrastructure sharing, as it implicates not only the site but the equipment, installations and other resources. Results from the GSR 2008 as well as the best practice guidelines on innovative infrastructure sharing strategies to promote affordable access for all, should be taken into account in this report.

Session 11: Centres of Excellence – proposal to support capacity building in the region

As requested last year in the TAF meeting in Djibouti, representatives from the two African Centres of Excellence, AFRALTI for English speaking countries, and ESMT for French speaking countries, participated at the seminar and SG3RG-AFR meeting in order to present their program of courses as well as their projects to establish a sustainable network of selected training and educational institutions that can provide high-level designed training for policy makers, regulators and senior managers of ICT operators and service providers.

3. Follow-up activities

During the seminar, countries requested that next year ITU-D should present the guidelines on cost modeling being developed in the framework of the ICT regulation toolkit.

During the SG3RG-AFR Group meeting discussion on cost models, it was agreed that a working group could further consider the matter and make recommendations regarding future work, both with respect to COSITU and with respect to possible future cost models. Specific topics to study include how to obtain the required data from operators, and develop general principles for cost models. The group will be led by Zimbabwe, and will include any interested countries, in particular Côte d'Ivoire, Senegal, South Africa, Togo, Uganda and Zambia.

The Group requested ITU-D to continue supporting countries that are using COSITU in the region, especially if they are interested in using the source code for developing a new version.

All the presentations made at this seminar as well as results, and list of participants, are available at: <http://web.itu.int/ITU-D/finance/work-cost-tariffs/events/>.

The President of the SG3RG-AFR Group expressed his appreciation to BDT for holding this seminar and requested that this event be held every year.