

## Regional Seminar on Costs and Tariffs for Member Countries of the Regional Group for Asia and Oceania (SG3RG-AO) (former TAS Group)

Vietnam, 4-5 March 2009

# FINAL REPORT ON THE SEMINAR

CARMEN PRADO-WAGNER TELECOMMUNICATION DEVELOPMENT BUREAU

# 1. Introduction

Within the framework for the implementation of the BDT's Doha Action Plan (DAP) specifically Programme 4, "Economics and Finance, including costs and tariffs", and in coordination with ITU-T Study Group 3, the Regional Seminar on Costs and Tariffs and the regional meeting of the Study Group 3 Regional Group for Asia and Oceania (SG3RG-AO) were held in Hanoi, Viet Nam from 4 to 6 March 2009. The seminar and meeting were organized in conjunction with the Ministry of Information and Communication of Viet Nam. Sixty delegates from ten countries participated.

Mr. Pham Hong Hai, General Director of the Ministry of Information and Communication of Viet Nam opened the seminar and welcomed the delegates, expressing his appreciation to ITU for the organisation of this seminar and meeting that are a significant forum for exchange of views in the region.

Mr. Kishik Park, Chairman of ITU-T Study Group 3 addressed a message to all the participants encouraging them to continue working on this important matter for the whole region. Ms Prado-Wagner, in her opening remarks, noted that the agenda of the seminar was developed in coordination with the Management Team of the SG3RG-AO group with the objective to support the activities and discussions of this group.

## 2. Results

The agenda comprised subjects requested during the TAS Group seminar held in Brisbane, Australia in July 2008 as well as responding to requests from countries in the region. Discussions focussed on BDT activities specifically Programme 4 on the basis of regional priorities.

This seminar contributed to the work of the SG3RG-AO especially on the subjects of cost modelling and cybersecurity issues, as requested by the region.

## Session 1: Cost modelling and methodologies

### ITU-D strategy on cost modelling

During the presentation of the ITU-D strategy on cost modelling by the BDT Representative, it was announced that the source code of the COSITU software will be made available to National Regulatory Authorities (NRAs), so that ITU Member States currently using this cost model application can adapt it to their national circumstances. ITU's work in cost calculation will help ITU Members to build cost-calculation capacity so that regulators and policy makers can make their own cost calculations based on their own cost strategy.

The importance of the cost model development training, organised by BDT in November 2008, was raised as part of the mandate of the ITU related to cost and tariffs calculation. This training will be repeated in 2009 in different regions in coordination with the ITU Centres of Excellence. Regarding the Asian and Oceania region, at present there is no request for this training, but ITU is open to discuss the possibility of organizing a similar training session for this region. The Chairman encouraged people in the region to request the ITU to organise a training session on cost model development in the region.

## Major Results from the 1st ITU-T SG3 Meeting (19-23 Jan. 2009, Geneva)

A description of the Study Group 3 organization and structure was presented. The responsible studies questions (to be clarified...) were also presented, taking into account the three working parties on: WP1 Network capabilities

and service features' tariff principles; WP2 Charging, accounting and settlement of traditional services; and WP3 Study of economic and policy factors for international telecommunication services. The presentation emphasized the interest that this Study Group has in maintaining the work of the Regional Groups as well as the Rapporteur Group on terms and definitions.

It was also announced that a panel or workshop on IPV6 will be organized together with the next SG3 meeting, to be held in Kampala in September 2009, taking into consideration the level of understanding of this issue. On Network Externalities a recommendation at the WTSA-08, D.156, "Network Externalities" has been approved with reservations from 28 countries. Items to be further studied are included as an Appendix to D.156, and the objective is to complete the study by the 2011 SG3 meeting.

The Financial Aspects of Network Security, a study on Financial Aspects of Network Security: Malware and Spam, prepared in coordination with the BDT, and the report of the BDT Seminar on the Economics of Cybersecurity for the TAS region, Brisbane, Australia, 15 July, 2008, have been reviewed by the Study Group 3.

Considering the importance and interest for developing countries of this issue, it was requested that ITU-D Programs 1, 3, and 4, should present all the ITU-D activities related to economic and regulatory aspects of cybersecurity. In this regard, the session on Cybersecurity was relevant to this seminar.

#### Regulatory aspects of telecommunications services - wholesale costs and retail tariffs

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 tariff for end-users and wholesale interconnection and access was discussed, taking into account the 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 of incentives to build up competition using replicable elements. Case studies from Bangladesh, Malaysia and the United Arab Emirates were discussed. Participants expressed their concern regarding the global crisis and how regulators could react to it. Fortunately, the telecom sector is more stable than other sectors, and although the growth of telecommunications is still increasing in the Asian region, but it remains a challenge for regulators and operators.

### Market mechanism and cost reporting - experience from Indonesia

Trying to share experiences from different countries and develop exchange of information, the experience from Indonesia on market mechanisms and cost reporting was presented. Some emphasis was put on the segmentation of services, based on fixed, mobile, multimedia and unregulated business, where it was explained that operators should separate the information about different services. Participants were interested in accounting separation, how it ensures the difference between the accounting statement and the accounting separation data, because in general, operators are unwilling to provide data. In Indonesia, since September 2009, the operators must present data audited following the rules of accounting separation in vigour.

#### Telecommunication tariff regulation in Viet Nam

This was a very interesting presentation about the complete process of tariff regulation from the past to the current regulation including market and tariff mechanisms in Viet Nam.

The previous methodology used for price regulation was cost based. Today, price cap regulation is in force, and in the case of the SMP operator, this price cap is determined by benchmarking of tariffs in neighbouring countries.

### Interconnection cost models and practices in Korea

This presentation was oriented to PSTN interconnection, interconnection issues under VoIP environment and finally under all-IP environments including NGNs. In Korea, the methodology for setting up fixed and mobile termination (interconnection) rates were based on Historical cost accounting (HCA), which moved to LRIC in 2004 to set up more efficient and market oriented termination charges. The speaker presented the pricing mechanisms or VoIP interconnection including cost drivers and settings for cost-based charges for VoIP interconnection.

Regarding NGN challenges to Regulators, Korea considers that Regulators may not have lawful authority to mandate interconnection and to regulate rates, because VoIP and other internet-based services do not fit within a telecommunications services classification.

Participants showed interest on the determination of migration costs, as well as direct and indirect costs and the implications of the charging models presented in the present situation in Korea.

## Panel discussion on cost modelling strategies applied by countries in the region

In the afternoon of 4 March, 2009, a panel discussion was chaired by Mr Scott W Minehane (Australia). Other panellists included Ms Carmen Prado-Wagner (ITU), Mr Kishik Park (Korea/Study Group 3), Mr Hutagalung Gunawan (Indonesia), Mr Pham Hung Thang (Viet Nam) and Mr Byoung Nam Lee (Korea).

After a slow start, the session, which went longer than its allocated time, was very interactive with many questions being raised on a number of topics by regional participants.

The key focus of the questions and comments from the floor and panellists were in relation to:

- the impact of 3G spectrum fees on retail tariffs in markets which had auctioned 3G spectrum (e.g. Indonesia);
- how should markets regulate 3G tariffs (a specific question was put to Viet Nam who are finalising their 3G process currently by way of a 'beauty contest');
- network neutrality and the US debate on such issues. In particular, how might it affect network costs for broadband service delivery, what the implications were of internet companies like Google investing in international submarine capacity in Asia;
- how should the costs relating to shared assets be apportioned between services (a real focus from the Philippines);
- international trade issues associated with telecommunications regulation including both the WTO and regional FTA negotiations; and
- the likely impacts of the Global Financial Crisis on both retail and wholesale costs and how should they be taken into account by Regulators.

There was also a discussion on the ITU COSITU costing model and the training on cost model development and whether there was any interest in training in the region.

## Session 2: Cybersecurity issues

### An overview of ITU Cybersecurity activities and the ITU Botnet Mitigation Project

Mr. Richard Hill made this presentation on behalf of the speaker who was unable to participate due to sickness. This presentation provided an overview of "ITU-D Activities Related to Cybersecurity and Critical Information Infrastructure Protection" and shared details on the ITU-D Cybersecurity Work Programme to assist Developing Countries. This also included the ITU Botnet mitigation project, with specific examples of what the ITU is trying to do to help developing countries in the domain of cybersecurity, specifically the case of Malaysia.

Some of the ongoing and planned ITU cybersecurity initiatives mentioned in this presentation included: activities dealing with the identification of best practices in the establishment of national frameworks for cybersecurity and the Critical Information Infrastructure Protection (CIIP); a national cybersecurity/CIIP readiness self-assessment toolkit; a botnet mitigation toolkit; cybersecurity guideline publications for developing countries. It was highlighted that most countries have not yet formulated or implemented a national strategy for cybersecurity and critical information infrastructure protection, and that with limited human, institutional and financial resources, developing countries face particular challenges in elaborating and implementing such policies. The ITU Telecommunication Development Sector has a Study Group Question, Study Group 1 Question 22, currently developing a best practices document containing a proposed framework for national cybersecurity efforts which is closely tied to the ITU-D Cybersecurity Work Programme to Assist Developing Countries.

### Id-SIRT Indonesia Security Incidents Response Team on Internet infrastructure

Today, although the critical infrastructure in Indonesia is vulnerable, the organization of the Id-SIRT programme, as well as the reinforcement of laws, is working to improve the cybersecurity against cases of cyber crime. The Response Team is an independent entity representing related stakeholders, the board governance system, internet services providers and institutions, including nation based response teams and other related bodies. The tasks and mechanisms of intervention were explained. Indonesia is working on developing training programs and research laboratories for societies, collaborating on national and international levels with related partners and stakeholders to offer technical information services and support.

The international coordination activities on Cybersecurity issues were highlighted. Indonesia is not the only country to develop this in the region. Other countries, such as Malaysia and Japan, are coordinating activities and sharing experiences, especially on how to prevent such threats.

### Korea National PKI status and directions for market promotion

A very interesting overview of the activities carried out by Korea in the area of Cybersecurity was presented. The Public Key Infrastructure (PKI) policy takes into account accreditation requirements. This concerns the financial capability, personal resources, facilities and equipment necessary to operate. Regarding the interoperability, there is strong collaboration between Korea, Japan, Singapore and Taiwan, developing the certificate profile application. PKI business models are related to the certificates of confidentially provided to enhance the security of electronic payment processes, mobile banking services, credit card payments, housing subscription deposit systems, education, medical information, e-bidding, etc. Korea is now working on electronic signature promotion.

The role of the government in this initiative is to promote and support the development of cybersecurity activities, as well as funding tools and mechanisms to apply the PKI efficiently.

## 3. Follow-up activities

Participants requested BDT to organize training on cost model development in the region this year, and to look into the possibility of granting fellowships to the regulatory authorities of LDC countries. BDT agreed to examine the possibility of coordinating this in conjunction with the ITU Regional Offices and Centre of Excellence.

The Chairman presented the concluding remarks of the Seminar and expressed her appreciation to all the delegates for their active participation, the speakers for their interesting presentations and discussions, to BDT and TSB for holding this seminar and requested that this event be held every year.

All the presentations, list of participants and conclusions of this Seminar are available at the following website address: <a href="http://www.itu.int/ITU-D/finance">www.itu.int/ITU-D/finance</a>.

## 4. Results from the Study Group 3 Regional Group for Asia and Oceania related to Programme 4 activities

During the SG3RG-AO, the discussions related to the TAS cost model enhancements (LRIC), it was noted that at present no development is being carried out on this methodology. The BDT representative explained the ITU-D cost model strategy, specifically the release of the source code of COSITU to National Regulatory Authorities and Regional Organizations (if required) and the development of training for:

- Executive-Level Training for Heads of regulatory authorities: Strategic Impact of Cost modeling on ICT development

- Expert-Level Training for national regulatory authorities on cost model development

The Expert-Level training will be replicated in Africa, Americas and Arab States.

After discussion on cost modeling and methodologies, Viet Nam requested the possibility to organize training for the Asia and Oceania Region, considering both training sessions, and suggested reducing the number of days, for instance 2 days for Executive course and 8 days for Technical staff.

Thailand through their national telecommunication environment showed an interest in COSITU. They were advised to contact the ITU Regional Office to discuss the possibility of the technical assistance.

Regarding the discussion on mobile termination charges and mobile roaming, the terms of reference of the new group in charge of this issue were presented. The Regional Group was informed by the BDT representative about the evolution of the works on the study on mobile termination rates that is being carried out in the framework of the Regulatory and Market Environment Division of the BDT.

On the subject of NGN charging, the BDT representative reported that a study on NGN interconnection and access case study is being prepared by BDT and will be presented at the Rapporteur meeting of Study Group 1 Question 12-2/1 on tariff policies, tariff models and methods of determining the costs of services on national telecommunication networks,

Telecommunication Development Bureau (BDT)

including next generation networks. With the approval of the Rapporteur Group of Question 12-2/1, this study could be shared with Study Group 3.

Concerning the future work programme of the SG2RG-AO, it was decided to nominate lead countries and representatives for the different subjects, which will be under study in the framework of the work in this region. The issues as well as the leaders are:

Main issue	Lead country	Rapporteur	Notes
Mobile Termination and Mobile Roaming	Japan, subject to confirmation	Ms Hondo, subject to confirmation	Thailand and Vietnam indicated that they would consider naming a co- Rapporteur
NGN Charging	Korea	Mr Yongsun Choi., Ms Sriprasertsuk (Thailand) is co-Rapporteur	Vietnam indicated that they would consider naming a co- Rapporteur
Revision of the SG3RG-AO questionnaires	Indonesia	Mr Hutagalung, Vice-chair of SG3RG-AO	
Revision of the International Telecommunication Regulations (ITRs)	Singapore, subject to confirmation, with the assistance of Vietnam		
Fraud and risk management, including the economic aspects of security	The lead country needs to be identified.		
International Internet Connectivity, including Traffic Flow Multi-factors	The lead country would be China and Malaysia, subject to confirmation		

It was agreed to explore the possibility of holding the next SG3RG-AO meeting and Seminar in Korea, just prior to the 2010 meeting of SG3, which has been tentatively planned to take place in Korea in the May-June 2010 timeframe.

The final report of the SG2RG-AO meeting is available on the website: <u>http://www.itu.int/ITU-T/othergroups/tas/index.asp</u>

The low level of participation of country delegations to the meeting was noted. Some countries explained their budget limitations and the financial crisis as a reason for this. The Chairman thanked the host country for its excellent organization and generous support, and the BDT and TSB staff for their support. The meeting thanked the management team, the BDT and the TSB staff for their excellent work.