ITU Regional Development Forum "Bridging the ICT Standardization Gap for the Americas region" Brasilia, 19-21 May 2008 Summary Report

The Forum was jointly organized by **ITU-T** and **ITU-D**, in cooperation with Inter-American Telecommunication Commission (CITEL), and hosted by **ANATEL**, Brazil.

More than 200 participants attended, from 17 countries in North, Central and South America as well as the Caribbean.

At the opening ceremony, the chairman, H.E. Ambassador Ronaldo Sardenberg, President of Anatel, Brazil, confirmed the Anatel's interest in increasing its cooperation with ITU and other regulatory agencies. He stressed the importance of the Forum in terms of preparing for WTSA-08 and discussing the "standardization gap". He pointed out that the capacity to participate in the standardization process is of fundamental importance to decrease the standardization gap between developed and developing countries.

In his speech, Mr. Clovis Baptista, Executive Secretary of CITEL, underlined the great impact that the information society has on society. The information society responds to society's needs and helps people build on progress. He also reported an increase in the number of available services within the Americas region. Moreover he added that a universal and suitable infrastructure is one of the objectives necessary to accelerate the process of American integration.



Mr. Malcolm Johnson thanked the Ambassador for hosting the event, and CITEL for its cooperation. He expressed his appreciation to countries in the Americas for their active support of ITU's activities, especially its standardization work. He highlighted the importance of standards for international communications and global trade. He added that globalisation requires global standards, and a global standards body like ITU clearly has an increasing role to play.

In his speech, the TSB Director also raised the serious problem of cost of participation, especially in meetings in Geneva, as well as the cost of membership, particularly for small start-up companies in developing countries. He said that there had been attempts to overcome these difficulties, and that the issues would be hot topics at the upcoming World Telecommunication Standardization Assembly (WTSA-08).

The Director said that he had long encouraged members to host meetings in the regions, and had recently established a fund to assist hosts with the cost of doing so, as well as for providing fellowships to attend the meetings. He also mentioned the invitation to hold an NGN Global Standards Initiative (GSI) meeting in the Americas region in September 2009. Moreover, he added that ITU-T has also been trialling new collaboration tools which will allow remote participation in ITU-T meetings.



Day 1: Monday 19 May

The Forum was chaired by Mr. Plínio de Aguiar Junior, Member of the Governing Board of Anatel, Brazil

Opening Session: Assessing needs from the regions: ICT standardization and development in the Americas.

This session assessed the impact of ICT standardization and development in the Americas region including the Caribbean area and presented a number of ICT development experiences from the region. It was structured as follows:

- Mr. Juan Zavattiero: "ITU-D activities to help ICT development in the Americas Region"
 [PRESENTATION]
- Mr. Clovis Baptista, Secretary of the Inter-American Telecommunication Commission (CITEL): "Overview by CITEL of the digital divide and strategies for its reduction" [PRESENTATION]
- **Mr. Kirk Sookram**, Resource Planning and Management Engineer, Telecommunications Authority of Trinidad and Tobago: "Overview of Caribbean Telecommunications Union: Caribbean ICT Development Projects". [PRESENTATION]

Session 1: Overview of ITU activities, how to participate in ITU work and address global connectivity

This session provided an overview on ITU activities related to the Americas region. It highlighted decisions taken by the last Plenipotentiary Conference of 2006 concerning bridging the standardization gap (Resolution 123 PP-06) and the activities carried out by the three ITU sectors. Its structure was:

• **Mr. Paolo Rosa**, Head, Workshops and Promotion Division, TSB, ITU: "Overview of ITU-T - Leader in ICTs and Telecommunications Global Standards". [PRESENTATION]

This presentation provided the most important information concerning the ITU-T and its secretariat: the Telecommunication Standardization Bureau (TSB). It allowed a better understanding about the standardization sector and its achievements, the main activities and its commitment for the future.

• **Mr. Fabio Leite**, Deputy Director, Radiocommunication Bureau (BR), ITU: "ITU Radiocommunication Sector (ITU-R)". [PRESENTATION]

Fabio presented the structure and activities of the ITU Radiocommunication Sector (ITU-R) with practical information for the participation in the study group work.

 Mr. Riccardo Passerini, Head, Telecommunication Technologies and Network Development Division, Telecommunications Development Bureau (BDT), ITU: "ITU-D Activities". [PRESENTATION]

Riccardo gave an overview of the ITU-D, TDAG, WDTC-06 (including the plan up to 2010 and the DOHA-06 operational plan). He also highlighted the difficulties concerning the digital divide in developing countries and showed an overview on the ITU-D program implementation.

Session 2: The Americas region development issues

This session focused on ITU-D activities to help ICT development and implementation in developing countries. Topics include ICT application and network development (e-services, the Americas and its recent achievements, capacity building (broadband deployment). Moreover the activity of the ITU-D Regional offices (AMS Regional Initiatives) was presented

• **Mr. Omar De Leon**, Consultant, ITU: "La Convergencia en el desarrollo del acceso de Banda Ancha". [PRESENTATION]

Mr. De Leon highlighted the technological, economical, business and regulatory aspects of the market development in the region with reference to the development of the wired and wireless broadband as the ground on which the ITC can be build-up.

• **Mr. Heliomar Medeiros de Lima**, Director of the Department of Digital Inclusion Services, Ministry of Communication, Brazil: "Digital inclusion initiatives of the Ministry of Communications". [PRESENTATION]

In his presentation Mr. De Lima This described the main digital inclusion initiatives of the Ministry of Communications. These initiatives seek the massification and the universalization of access to information and communication technologies enabling all citizens to access information and private and public services (e-gov) available on the Internet.

• **Ms. Regenie F. Ch. Fräser**, Secretary General, Caribbean Association of National Telecommunication Organizations (CANTO): "ITU for Americas. Connect The Caribbean (CTC)". [PRESENTATION]

Ms. Fräser, after an introduction to CANTO, gave details concerning the "Connect the Carribean (CTC)" initiative as part of the ITU program to connect the world. The initiative consists of three aspects: infrastructure development, enabling a harmonized framework and developing relevant and affordable services and applications.

• **Ms. Judy Anderson**, Project Manager, Spectrum Management Authority of Jamaica, Caribbean Telecommunication Union (CTU): "Overview of Caribbean Telecommunications Union's Caribbean Broadband Review". [PRESENTATION]

The presentation showed how broadband uptake in the Caribbean has been limited because of cost. The cost was high because of little competition in international facilities. Now that there are several integrated pan Caribbean fibre systems, the price of broadband is falling dramatically in every country, with competition on the international facilities.

Day 2: Tuesday 20 May

Session 3: Current ITU standardization hot topics

The session addressed current standardization topics in ITU-T. It presented each topic from various perspectives: technology, evolution and trends, current and future studies, new services that could derive from new technologies particularly focusing on how they could serve the Americas region. NGN studies on architecture, service requirements, network capabilities, migration scenarios, mobility and fixed-mobile convergence were presented together with Multimedia and Optical Transport Networks & broadband access issues, Voice over IP (VoIP), Emergency communication and Accessibility are also considered in this session.

- Mr. Simao Campos, Counsellor, ITU-T SG 16, ITU: "Current ITU standardization hot topics: Multimedia". [PRESENTATION]
- **Mr. Wayne R. Zeuch**, Rapporteur of the Group on Standards Coordination of the PCC.I/CITEL; "Relationship between ITU Standardization and CITEL's Standards Coordination". [PRESENTATION]

Considering that CITEL has historically looked at the work of the ITU as a key source of telecommunication technology discussions and standards development, this presentation focused on the CITEL-PCC.I standards coordination process and the endorsement of standards for the Americas Region. Under the broad topic of Next Generation Networks, CITEL has identified and reviewed a wide variety of technologies and corresponding standards studied within the ITU. Interaction between the ITU and CITEL has enabled CITEL to address the significance of new technologies and services to the Region and to assess the need for endorsement of related standards.

• **Mr. John Visser**, Nortel, Canada: "ITU-T Activities on IMT-2000, Mobility, Fixed-Mobile Convergence, and Future Studies". [PRESENTATION]

Mr. Visser underlined how the mobility is fundamental to modern telecommunications. It is the basis for the growth of telecommunications tomorrow. His presentation gave a brief overview of the emergence of mobility as a key ITU-T topic (i.e., network side of the IMT-2000 Family), showing how the ITU sectors and other SDOs are cooperating to provide global IMT-2000 specifications and show how the convergence is at the heart of the work on Next Generation Networks.

• **Mr. Haroldo Pazzini Motta**, Manager of Equipment Certification Processes, Anatel, Brazil: "Mutual Recognition Agreements". [PRESENTATION]

Mr. Pazzini Motta presented the Mutual Recognition Agreements - related to type approval of telecommunication products - aim at facilitating trade among participating parties by streamlining conformity assessment procedures. The presentation provided an overview of the basic principles of MRAs and its benefits. It also described the effects of standardization, the phases of implementation, and the current status of ARMs within CITEL and Mercosul.

Session 4: International Radiocommunication standards and guidelines

The session addressed the ITU-R standards making process, with emphasis in the collaboration with external organizations and the participation of developing countries; proposals in how to address the standardization gap issues will be presented.

• **Mr. Fabio Leite**, Deputy Director, Radiocommunication Bureau (BR), ITU: "ITU Radiocommunication Standardization Activities". [PRESENTATION]

The BR Deputy Director described the activities relating to radio conference preparations and standards development in the ITU Radiocommunication Sector (ITU-R) and shows statistics of the participation of developed and developing countries in the ITU-R.

• **Dr. Bruce A. Gracie**, Industry Canada: "Global Standards Collaboration". [PRESENTATION]

Mr. Gracie considered how the identification of mechanisms to enhance national, regional and international collaboration and cooperation on key standardization issues is becoming essential, not only in response to the predominantly global nature of such issues, but also in the interest of optimizing the use of resources and avoiding duplication of effort. Accordingly, the Global Standards Collaboration - consisting of the ITU as well as Participating Standards Organizations (PSO) from Europe, the USA, Canada, Japan, China, Korea, and Australia - meets normally on an annual basis to exchange information on the progress of standards development in the different regions and the state of the global standards development environment. Opportunities for participation in GSC meetings by observer entities, such as Regional Telecommunication Organizations, offer the prospect of expanding the scope of discussions to include those previously excluded from such dialogue, thus contributing to bridging the standardization gap.

• **Mr. Marcos Castello Branco**, Researcher, CPqD, Brazil: "Broadband Wireless Access systems and developments". [PRESENTATION]

Mr. Marcos Castello Branco addressed both spatial and terrestrial Radiocommunication Services issues presenting how they have been for years implemented in Brazil following interregional and international rules through CITEL and ITU-R activities respectively. In the Brazilian Study Committees, mostly chaired by ANATEL, several interested parties such as service providers, equipments manufacturers, R&D Centers and universities have been discussing technical and regulatory topics and generating Brazilian contributions to those international standardization forums thus converging national interest to the international rules. These resulting documents then usually become national rules for new implemented services, systems and data bases.

• Mr. Kirk Sookram, Resource Planning and Management Engineer, Telecommunications Authority of Trinidad and Tobago, Caribbean Telecommunication Union (CTU): "Overview of Caribbean Telecommunications Union: Spectrum Management Policy Reform Project". [PRESENTATION]

The presentation presented a CTU project to harmonize the management of radio frequency spectrum resources amongst Member States. One of main objective of the project is to promote the most efficient, effective and productive use of spectrum across the Caribbean. Moreover, the presentation considered areas to be identified for further spectrum management standardization, including an identification of the resources required to facilitate this standardization.

Session 5: Security and regulatory issues

This session provided an overview of security standards and current security standardization work. It assessed whether developing countries and countries with economies in transition have any special security need that is not already being addressed by the current studies. Security topics will include technologies and convergence implications and covered cybersecurity issues e.g. combating spam, Identity Management. Moreover case study/experiences from developing countries and other regions were presented. The session also addressed regulatory issues and the role of the regulators and regulatory bodies.

• **Mr. Joe Richardson**, Consultant, ITU: "ITU-D Cybersecurity Activities. Overview of Activities to support the Americas Region Activities". [PRESENTATION]

The presentation reviewed the activities underway within ITU-D to develop best practices, a framework for action and tools to assist ITU members.

Mr Richardson considered how the integration of information and communication technologies (ICT) into almost every sphere of daily economic and social activity has increased the dependence of individuals, organizations and governments on globally interconnected networks. At the same time, new cyber-threats have emerged that have an impact on confidence and security in the use of ICTs. He said that in order to protect networked infrastructures and address these threats, coordinated national action is required for the prevention, preparation, response and recovery from incidents. National frameworks and strategies are needed that allow stakeholders (end users, industry, and governments) to use all the technical, legal and regulatory tools available to promote a culture of cybersecurity.

• **Mr. Fabrizio Savi**, Public Affairs Legislation Analysis, Telecom Italia: "Regulatory issues for next generation networks". [PRESENTATION]

The presentation described some details of a regulatory model and suggested some points for discussion and further study. Mr Savi highlighted how the introduction of next generation networks requires huge investments and for this main reason the operators need a reasonable level of regulatory certainty. Furthermore, an adequate return on investment is strictly related to the success of new converging services. He presented the view that a successful regulatory strategy, adopted by the regulators and supported also by the incumbent operators, can be structured in two phases: a transition period, where the safeguard of the current wholesale offers to the new entrants is complemented by the opening of some infrastructure bottlenecks; a second phase, with the gradual removal of the wholesale obligations keeping, if needed, the access to the ducts and poles of the incumbent's network.

• **Mr. Simao Campos**, Counsellor, ITU-T SG 16, ITU: "Security and regulatory issues. ITU standardization activities on telecommunications for disaster relief and early warning". [PRESENTATION]

Simao presented the activities and studies in progress in the whole ITU concerning early warning, emergency communication and disaster relief and their involvement in a Citizen/authority relationship, presenting the various scenarios and the activities performed in the three sectors of ITU.

Session 6: NGN technology, systems. Development trends and migration scenarios The session presented the evolution of NGN and future perspectives in the relevant access technologies, service and network architecture with special focus on convergence, home, office and mobile applications, Internet Protocol-Based Platform, Multiple Access Networks pilot cases, and possible scenarios taking into consideration the relevant Business Models and Opportunities. Moreover, charging and accounting principles for NGN, it also looked at migration scenarios for NGN and accounting principles for NGN, including related telecommunication economic and policy issues at regional level.

Mr. John Visser, Nortel, Canada: "NGNs, Hyperconnectivity and the Evolution of Structures and Services". [PRESENTATION]

Mr. Visser showed how convergence in a transition of telecommunications, computing and broadcast to an all-IP based infrastructure is not only possible but also a need. The megatrends of hyperconnectivity, communications enabled applications and ubiquitous low cost broadband are providing both tremendous opportunities and challenges.

• **Mr. Oscar Messano**, Rapporteur of the Group on issues relative to Internet resources: "Internet Protocol based platform". [PRESENTATION]

Mr. Messano addressed the issue of NGN as a challenge in all the areas from business to technology to support existing and future services. He considered that even if the technology is available, the status and private sector are still not ready and put the question to the audience: "What do we have to do considering that time is running?"

• **Prof. Ademir Lourenço**, Researcher, FUCAPI, Brazil: "Summary about our experience in the process of creating a Recommendation for ITU". [PRESENTATION]

Prof Lourenço briefly discussed about the experience lived by ANATEI, FUCAPI and UFPB during the meetings from the "Focus Group on IPTV" (Tokyo/2007 and Malta/2007). In particular he addressed a contribution that added a new topic "Standards for IPTV multimedia application platforms". In addition he addressed also issues dealing with the ITU-T Q13/SG16 and "IPTV Global Standards Initiative" (IPTV GSI).

Conclusions and wrap-up

In the last session Mr. Plínio Aguiar asked to the sessions' chairmen to summaries the most important topics considered in their respective session and to provide conclusions.

- Mr. Zavattiero considered his session as an informative one, dealing with development aspects digital divide, regional organizations and investments in the region.
- Mr. Visser summarized the "hot topics" of the standardization sector, services, NGN, multimedia, standardization, mobility, convergence and mutual recognition agreement.
- Mr. Maximiliano Martinhão mentioned the Radio Regulation, the regulatory gap and the participation of regional entities, such as CPqD and CTU, in the spectrum management issue.
- Ms. Marian Gordon recalled the regulatory aspects for security, "frameworks", legal mechanisms, studies carried out in ITU-T SG 16 for multimedia, early warning for disasters and investments in the field of the NGN.
- Mr. Bruno Ramos considered the issue of convergence, the vision of the industry, the migration towards IPv6 and the Brazilian experience for the standardization of IPTV systems.
- The TSB Director considered the importance of standards and the impressive participation and interest in the Forum and his expectations about a good participation from the region in the coming WTSA-08 world conference.

At the end of the Forum, Mr. Aguiar concluded underlining the participation in the event that allowed exchange of experiences and opinions with a positive impact on the participants and on the region.