

## **ITU Regional Standardization Forum for Americas Region**

**Washington D.C, United States**

**21 September, 2015**

### **Main Outcomes of the Forum**

The main objective of this document is to summarise the presentations and discussions which took place during the ITU Regional Standardization Forum for Americas Region on 21 September 2015 at the Organisation of American States in Washington D.C. Dr Chaesub Lee, Director of TSB and Mr Oscar Leon, Executive Secretary of CITELE delivered their address during the opening ceremony.

#### **Session 1: Bridging the Standardization Gap: Establishing a National Secretariat for Standardization**

This session was chaired by Clovis Baptista, CITELE. United States and ANATELE, Brazil presented how their national standardization secretariat is structured. Mrs Marion Gordon, US State Department presented the US International Telecommunication Advisory Committee (ITAC) and how it helps to coordinate participation at national level in ITU-T study groups meetings. Mr Joao Alexandre Zanon, ANATELE presented the standardization secretariat in Brazil.

Mr Vijay Mauree, Programme Coordinator, TSB, ITU presented the guidelines for developing countries to establish a national standardization secretariat. One of the new measures adopted under WTSA-12 Resolution 44 is the development of guidelines for developing countries to set up a national standardization secretariat with the objective of enhancing coordination of standardization activities at the national level and participation in ITU-T study groups. The ITU guidelines takes into account the different capability levels for standardization across the developing countries, by proposing three possible structures, showing how it is possible to establish an NSS at a basic level with minimal cost or resource requirements. The main target audience for the guidelines are developing countries which are in the process of or have just put in place measures to coordinate ICT standardization activities at national level and effective participation in ITU-T study groups. It was noted that the structure proposed in the ITU guidelines is similar to the structure for United States and Brazil. TSB provides technical assistance to countries that would like to establish a national standardization secretariat. A formal request needs to be addressed to TSB Director for this purpose.

Mr Wayne Zeuch, CITELE presented the standards coordination role in CITELE and how it is helping to reduce the standardization gap. CITELE has developed its Standards Coordination process for the purposes of:

- raising awareness to those in the Region not directly involved in standards development
- highlighting those standards of significant benefit to the Region

The example of PCC.I Rapporteurship on Standards, Conformity and Interoperability was mentioned as one example. It focuses on the study of standards that are necessary for the smooth transition to Next Generation and Future Networks, addresses issues relating to the convergence of existing networks in a way that maintains interoperability across networks of the region and utilizes the tools available (Standards Coordination Documents, Technical Notebooks, etc.) to identify standards that best serve the current and future needs of users throughout the region. It

draw primarily on the work of existing standards-setting bodies, including the ITU-T, IETF, and other fora as appropriate.

It was noted that CITELE would recommend to developing countries in the region to adopt the structure proposed by ITU for the National Standardization Secretariat so that they can also coordinate their participation in the CITELE meetings. The National Standardization Secretariat was seen as a good framework for developing countries to coordinate their standardization activities at national level for effective contribution in international standardization organizations.

## **Session 2: Digital Financial Services**

This Session was moderated by Vijay Mauree, Programme Coordinator, TSB, ITU. The objective of this session was to present the work of ITU, World Bank and Bill & Melinda Gates Foundation in digital financial services and provide an overview of how countries in the region (Brazil and Paraguay) are tackling the problem of financial inclusion. In his introductory remarks, Vijay Mauree, noted that according to the 2014 FINDEX report from the World Bank there are 2 billion adults unbanked. However, out of these 2 billion adults, 1.6 billion have a mobile phone. Therefore there is a huge opportunity to bridge the financial inclusion gap. Digital Financial Services provides innovative means of bringing people out of poverty and keeping them out. Vijay Mauree gave an overview of the objectives and activities of the ITU-T Focus Group Digital Financial Services and invited countries in the region to participate in the work of the Focus Group.

Mr Joao Alexandre Zanon, ANATEL provided a brief overview of the roles of the main stakeholders of digital financial services in Brazil, the areas of collaboration between Central Bank and telecom regulator and the legal framework for digital financial services. Mrs Rosita Najmi, Bill & Melinda Gates Foundation provided an overview of the activities of the Gates Foundation in the area of digital financial services. The change in the business model characterizing digital financial services was seen as a major shift which has enabled new entrants to enter this market. The example from India was mentioned, where the government has issued payment licenses to MNOs, the post and pharmaceutical companies as well to enter the digital financial services market to promote competition in this field.

Mr Thomas Lammer gave an overview of the activities of the Payments Aspects for Financial Inclusion Task Force (PAFI) of the World Bank. In his presentation, Mr Lammer highlighted that the World Bank President has set as target for Universal Financial Inclusion by 2020. Access to a transaction account is a stepping stone to financial inclusion, which includes a full range of formal financial services. Universal financial access is ambitious, yet achievable for the majority of the world's population by 2020, though full financial inclusion will take longer. It was noted that the report of the PAFI is available for comments till 7 December 2015. Countries were invited to submit their comments on the report to the World Bank.

Mr Diego Miranda, CONATEL, Paraguay presented the services provided by the main mobile money players in the country (e.g Tigo Paraguay) and the legal framework for digital financial services in the country.

It was noted that digital financial services can help to bridge the financial inclusion gap and there are issues such as interoperability, consumer protection, security, usability and competition to be addressed in order to scale up its usage. In this respect, the work of the ITU-T Focus Group on

Digital Financial Services is addressing those issues and countries were invited to participate in its work.

### **Session 3: Prospects for standardizing the Internet of Things (IoT)**

This session was chaired by Amy Alvarez, Executive Director of International Affairs, AT&T and its main objectives were to provide an overview of how the IoT will transform industries in the future, current IoT standardization landscape and information about the work at the level of ITU and CITELE in this area.

Geraldo Neto, Qualcomm provided an overview how IoT applications in domains such as M2M, smart cities and transportation would lead to transformation in these industries. CITELE Rapporteurship on Technological innovations and trends is also studying and evaluating the technical and regulatory best practices related to M2M communication with the aim to develop regional recommendations and guidelines.

Mr Mike Chartier, Intel made his presentation on the standardization landscape for IoT focusing on work which is taking place in various industry fora such as W3C, OneM2M, Industrial Internet Consortium, amongst others. It was noted that there is a lack of coordination at international level on standardization work of the various industry consortia and this is an area where ITU could have a role to play.

Sergio Trabuchi, Vice Chairman of ITU-T Study Group 20 (SG 20) provided an overview of the activities of ITU-T for IoT. ITU-T Study Group 20 will be responsible for international standards to enable the coordinated development of IoT technologies, including machine-to-machine communications and ubiquitous sensor networks. SG20 will develop standards and guidelines that leverage IoT technologies to address urban-development challenges, especially, the standardization of end-to-end architectures for IoT and mechanisms for the interoperability of IoT applications and datasets employed by various vertically oriented industry sectors. It was established by the Telecommunication Standardization Advisory Group (TSAG) in June 2015. The first meeting of ITU-T SG 20 will take place on 19-23 October in ITU, Geneva. A Forum on IoT empowering the new urban agenda will also be held on 19 October 2015 during ITU-T SG 20 meeting.

ITU-T SG 20 will be focusing on smart sustainable cities in its work amongst other industries. Smart Sustainable Cities are cities that use smart infrastructure and the IoT to improve and manage power, resources, and urban planning.

The Focus Group on Smart Sustainable Cities (FG SSC) developed 21 Technical Specifications and Reports. Three Technical Specifications and a Technical Report focus on KPIs for Smart Sustainable Cities.

ITU (through its Telecommunication Standardization Sector) in cooperation with other UN agencies, has now initiated a global project to:

- To support cities in the implementation and use of the ITU's SSC KPIs
- To test and verify the applicability of ITU-T Smart Sustainable Cities Key Performance Indicators (SSC-KPIs) in several cities of the world.

- ITU-T will implement a verification process for the SSC-KPIs and provide cities with a defined procedure to obtain a certificate from ITU.
- To develop a global Smart Sustainable Cities (SSC) Index.

Vladimir Daigele, BDT, in his presentation provided an overview of the activities of ITU-D for capacity building in the field of IoT.

It was observed during the session that IoT involves many manufacturers, spans multiple industries, and differs widely in application scenarios and user requirements. Standardization can create the necessary framework for any large-scale IoT deployment and ensure commercial revenues in future.

#### **Session 4: Conformity & Interoperability**

The session was moderated by Bruno Ramos, ITU Regional Director for Americas region and focused on the activities that are carried out by ITU, CITELE and ANATEL on Conformity and Interoperability.

Vijay Mauree, TSB presented the activities on Conformity and Interoperability in ITU-T sector. The ITU conformity and interoperability (C&I) programme mandated by Resolution 177 (Rev. Busan, 2014) is based on four pillars:

- Pillar 1: Conformity assessment (CA);
- Pillar 2: Interoperability events;
- Pillar 3: Human resource capacity building; and
- Pillar 4: Assistance in the establishment of test centres and C&I programmes in developing countries.

Actions of Pillars 1 and 2 are led by the Telecommunication Standardization Bureau (TSB) while actions of Pillar 3 and 4 by the Telecommunication Development Bureau (BDT).

The main activities of ITU-T under Pillar 1 are:

- The ITU [Product Conformity Database](#), endorsed by PP Resolution 177 to provide industry with a means to publicize the conformance of ICT products and services with ITU-T's international standards. This was launched on 18 December 2014 with entries of e-health devices compliant with Recommendation ITU-T H.810 "Interoperability design guidelines for personal health systems".
- The conformance testing pilot project on "network management interface related Recommendations (ITU-T M.3170 series)" is foreseen to be completed in 2015. ITU-T SG15 is also starting a conformance testing pilot project on Recommendations ITU-T G.hn series.
- ITU-T SGs continue assisting ITU-T SG11 to update the [living list](#) of Recommendations and related specifications within key technologies suitable for C&I testing and the [reference table](#) listing ITU-T Recommendations which are under ICT industry testing.
- The ITU-T SG11 Correspondence Group on 'Collaboration between ITU-T and testing laboratories (TL) for ITU C&I programme' completed its work in July 2014. It produced a baseline text "Testing Laboratories recognition procedure" for further work in Q.11/11 and proposed a two-step implementation of ITU's TL recognition procedure.

- ITU-T SG11 launched a new work item on unified measurement methodology of Internet speed quality usable for end-users on fixed and mobile networks.
- ITU-T SG11 is developing test specifications for SIP-IMS conformance testing.

The main activities under Pillar 2, Interop testing, are:

- Assessing the performance of mobile phones' narrowband and/or wideband communications with vehicle-mounted hands-free terminals was held in May 2014. It found that only 30% of mobile phones submitted for testing passed tests against performance requirements in Chapter 12 of Recommendations ITU-T P.1100 and ITU-T P.1110. As an outcome, the automotive industry urges ITU to publish a 'white list' of phones, compliant with ITU-T P.1100/P.1110, in ITU's conformity product database. Another event will be held in 2015.
- Joint ITU/APT C&I are held annually since 2013 on different topics of interest to the region.

Vladimir Daigele presented ITU mandate (PP-14 [Res. 177](#), WTDC-14 [Res. 47](#), WTSA-12 [Res. 76](#), RA-12 [Res. 62](#); Council decisions) and activities in Conformity and Interoperability under pillars 3 and 4.

Activities under pillar 3 - Capacity Building are:

- ITU C&I training courses focused on homologation procedures and type approval testing of telecommunication/ICT equipment, such as mobile terminals. On a regional basis, these training events ensure real laboratory experience on test equipment and test setup, new approaches and directives, EMC fundamentals, international standards, practical measurements in laboratory and case studies of regional and national C&I programmes in place. In 2015, C&I training events were carried out addressing procedures to establish C&I programmes, laboratory experience on type approval of mobile terminals, market surveillance best practices, and next-generation networks (NGN) interoperability aspects;
- Developing a C&I Training Programme based on existing ITU Academy environment as well as past C&I trainings events. It was recalled that all C&I training material is available [on-line](#) free of charge. The list of past and future [C&I events](#) was presented.

Activities under Pillar 4 – Establishment of test centres and C&I programmes in developing countries:

- Partnership with laboratories: ITU has signed MoUs for implementations of the C&I programme with CERT (Tunisia), CPqD (Brazil), Sintesio (Slovenia), Tilab (Telecom Italia), ZNIIS (Russia), International Accreditation Forum (IAF), and the International Laboratory Accreditation Cooperation (ILAC), and continues to look for interested partners in the regions. The China Academy of Telecommunications Research recently became an ITU Centre of Excellence in C&I for 2015-2018.
- In order to address specific national or regional programmes for implementation and reviewing type approval procedures of ICT products, ITU has been providing assistance to developing countries (e.g. Mongolia, Zambia, Côte d'Ivoire, Cameroon, and Honduras).
- [C&I Assessment studies](#) in the regions are being conducted by ITU to promote the establishment of a common C&I programme through development of MRAs and/or

building laboratories (national or regional laboratories), as appropriate. In 2014, C&I Assessment Studies were finalized for SADC Region (15 countries), Maghreb (5 countries) and the Caribbean (22 countries). Following up activities taking place in all these sub-regions were presented. Similar assessments studies covering regulation, institutions, laboratories and type approval procedures of telecommunication/ICT products are ongoing for East Africa Communications Organization community (EACO) countries and Central America countries (COMTELCA) in 2015.

- The results and recommendations from the C&I Assessment Studies were discussed at regional and subregional Workshops for all assessment studies mentioned above. The list of [C&I Workshops](#) was presented. For the Central American region, it was highlighted that the first Draft Report is under preparation and by the end of September it will be circulated to COMTELCA countries. The Final Report for COMTELCA will be presented during the C&I Workshop in Managua, Nicaragua, 10-12 November 2015.
- ITU produced guidelines on C&I: [Guidelines for Developing Countries on establishing conformity assessment test labs in different regions](#) (2012); [“Feasibility Study for the establishment of a Conformance Testing Centre”](#) (2014); [“Guidelines for the development, implementation and management of mutual recognition arrangements/agreements \(MRAs\) on conformity assessment”](#) (2013); [“Establishing Conformance and Interoperability Regimes for Developing Countries”](#), [basic](#) (2014) and [complete](#) guidelines (2015);
- ITU continues collaborating with [UNIDO](#), [ILAC](#), [IAF](#) and [IEC](#) to learn about best practices that can assist in the establishment or partnerships among ICT test centres.

Wayne Zeuch presented the activities of PCC.I on Conformity and Interoperability. Interoperability of networks and network components is a key mandate within CITEP PCC.I. CITEP continues to monitor conformance testing and interoperability activities and programs within the Americas Region and internationally. CITEP PCC.I invites contributions from Member States and the ICT industry regarding interoperability issues and their root causes, conformance testing programs and selections of standards that maximize interoperability. Providing interoperability of networks through standardization encourages market growth, promotes innovation and deployment of new services, and serves the current and future needs of the users of these networks throughout the Region. Countries in the region are invited to contribute to the Technical Notebook on conformity and interoperability which is maintained by CITEP and which serves as a repository for new and historical information on conformance testing and interoperability activities and programs within the Americas Region and internationally.

Joao Zanon, ANATEL made a presentation on the activities which are ongoing in Brazil, CITEP and ITU to combat the issue of counterfeit ICT equipment. The example of Brazil's SIGA and custom integration was presented. The CITEP PCC.I programme was presented which consists of the

- GTPR Correspondence Group on the Combat of Counterfeit, substandard and unauthorized mobile terminals.
- GTPR Rapporteurship on Fraud Control, Regulatory Non-compliance Practices in Telecommunications and Regional Measures against the Theft of Mobile Terminal Devices

In his presentation, Mr Zanon also outlined the ITU initiatives on this topic at the international level:

- PP-14 Resolution 188 on Counterfeit.
- ITU-T SG11 (Q8/11) Technical Report.
- ITU workshop on the combat of Counterfeit and substandard ICT devices in 2014
- Creation of three new work items in ITU-T Study Group 11 at the April 2015 meeting.

Due to the growing complexity and nature of this problem, there is a need to have actions at different levels, both bilateral and international, to address this problem.

### **Closing Session**

In his closing remarks, Dr Chaesub Lee, Director of TSB, summarized the main outcomes of each session:

- Each country in the region has different requirements and therefore this has to be taken into account. It is expected that the Guidelines for NSS be adopted in the region and could also be promoted by CITELE to countries in the region. Brazil' structure is quite similar to the one proposed in the NSS and other countries in the region could also learn from the Brazilian experience.
- The work of the ITU-T Focus Group Digital Financial Services is very important for countries in the Latin American region. CITELE could also work towards setting up a working group on digital financial services which will help to coordinate work in this field for countries in the region.
- The topic of Internet of Things will be a critical one in the near future and there is already a lot of work which is ongoing in different standardization bodies. However, there are many of issues which are not well studied such as dealing with IoT traffic and interoperability between different identification systems used in different verticals. Moreover, there is a lack of coordination at international level on standards development in this field. ITU as an international organization would have a role to play for facilitating global use of IoT. ITU-T Study Group 20 will provide an international platform where these matters will be discussed. Representatives from the Americas region are invited to participate in the work of this Study Group.

There is already quite a lot of work which has been done by ITU and CITELE on conformity and interoperability for countries in the region. Countries in the region were invited to participate in the C & I events organised by ITU. It was noted that the issue of counterfeit equipment is a growing issue for countries in the region and both ITU and CITELE could work together on developing future activities in this field.