
PLENARY MEETING

Document 54-E
26 June 2014
Original: English

Note by the Secretary-General

**REPORT OF THE DIRECTOR OF TSB ON THE ACTION PLAN IN WTSA-12 RESOLUTION 44
ON BRIDGING THE STANDARDIZATION GAP**

I hereby transmit to the Plenipotentiary Conference the report by the Director of TSB on the status of the implementation of the Action Plan in WTSA-12 Resolution 44 on bridging the standardization gap between developed and developing countries, pursuant to PP-10 Resolution 123.

Dr Hamadoun I. TOURÉ
Secretary-General

1. Introduction

WTSA Resolution 44 (Rev. Dubai, 2012) “Bridging the standardization gap between developing and developed countries”

“instructs the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of Telecommunication Development Bureau and the Radiocommunication Bureau, within available resources [...]

to report on the implementation of this plan [i.e. the action plan for the implementation of Resolution 123 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference; see Annex to WTSA Resolution 44] to future world telecommunication standardization assemblies and plenipotentiary conferences, with a view to reviewing this resolution and introducing the appropriate amendments in the light of implementation outcomes, as well as the budgetary adjustments needed to implement this resolution [...].”

Moreover, the ITU Strategic Plan adopted during PP-10 identified bridging the standardization gap (BSG) between developed and developing countries as one of the three strategic goals of ITU-T.

The four main programmes outlined in the action plan of WTSA-12 Resolution 44 are:

1. Strengthening standard-making capabilities;
2. Assist developing countries with respect to the application of standards;
3. Human resource capacity building;
4. Fundraising for BSG.

Since 2007, a total of 41 new countries have participated in ITU-T’s work that had not previously done so. Most of ITU-T’s Study Groups have seen a strong increase in participation in the current study period. In particular, participation by the Africa region rose. Over half of the workshops related to standardization are held outside Geneva. In addition, ITU-T study group meetings are also being hosted outside Geneva to attract participation from developing countries.

An internal task force chaired by the Director of Telecommunication Standardization Bureau (TSB), including representatives from the Telecommunications Development Bureau (BDT) and ITU Regional Offices, was established in 2009 to monitor the implementation of the action plan in Resolution 44.

A status on the implementation of the four programmes in WTSA Resolution 44 for the period 2010-2014 is provided in the Annex.

2. Programme 1: Strengthening standard-making capabilities

2.1. Standards Capability Index

In 2011, TSB carried out a study to assess the standardization capability of developing countries. The above study was carried out with the generous support of the Ministry of Science, ICT and Future Planning of the Republic of Korea and the Telecommunications Technology Association (TTA).

One of the main findings of the study is that developing countries participation in ICT standardization is hampered by a lack of understanding of the importance of ICT standards which results in inadequate funding for standardization work and coordination at national level for

participation in international standards forums. This inequality in standardization capabilities continue to contribute to the persistence of the digital divide between the developed and developing worlds. One of the recommendations of the study to improve the standardization capability in developing countries is to establish a national standardization secretariat coordinate ICT standardization activities and participation in ITU-T study groups.

2.2. Technical reports and manuals

The following technical reports and manuals have been produced during the period 2010-2014 to provide more information to developing countries on the best practices to implement ITU-T Recommendations:

- [Handbook on Fibre Optic Cables and Systems \(2009\)](#)
- [Deployment of packet based networks \(2010\)](#)
- [DSL Story \(2010\)](#)
- [Convergent Networks \(2010\)](#)
- [ITU-T Manual on Optical Transport Networks from TDM to Packet \(2010\)](#)
- [Object identifiers \(OIDs\) and their registration authorities \(2010\)](#)
- [Practical procedures for subjective testing \(2011\)](#)
- [Security in telecommunications and information technology \(2011\)](#)
- [Wireline broadband access networks and home networking \(2011\)](#)
- [Future networks \(2012\)](#)
- [Multiple Radio Access Technologies \(2012\)](#)
- [Impacts of M2M and Non-M2M Mobile Data Applications on Mobile Networks \(2012\)](#)
- [Migration scenarios from legacy network to NGN in developing countries \(2013\)](#)
- [How to increase Quality of Service \(QoS\)/ Quality of Experience \(QoE\) of IP-based Platform \(2013\)](#)
- [Telecommunications and Disaster Mitigation \(2013\)](#)
- [Applications of wireless sensor networks in next generation networks \(2014\)](#)

In addition, the following technical reports are in the pipeline for 2014:

- Green ICT standards roadmap
- EMF Guide
- IPTV green book
- New challenges for Public-Key Infrastructure standardization in Mobile Networks, Machine-to-Machine communication, Cloud Computing and Smart Grid
- Production of overvoltage protection guide
- Mobility Management in ITU-T: Its current development and next steps heading towards future networks
- Towards a Roaming Cost Model for Regulators

2.3. Mentoring for new delegates in ITU-T study groups

A mentoring programme for ITU-T study group members from developing countries was introduced for the first time in August 2011 to provide more information to new delegates about the procedures of ITU-T meetings and to enhance the contribution from developing countries. It has since featured as a regular part of ITU-T study group meetings and TSAG.

At the TSAG meeting in January 2012, a new position of mentor was established in study groups. The main role of the mentor will be to coordinate with representatives from developing countries in the study group with the objective of sharing information and best practices with regards to the application of ITU-T Recommendations to enhance the standardization activities in developing countries and in the regional groups. Through interaction with members from developing countries, the mentor could also identify capacity building programmes for ITU-T Recommendations which could be implemented by TSB thereafter under BSG.

2.4. Remote Participation and Interpretation

Remote participation is offered during all study group meetings at no cost (using a call-back option). Opening and closing plenaries benefit from full interpretation. Contributions to study groups can be translated into six languages if received two months before a meeting. Some of the Recommendations approved by AAP are also being translated. The new service of direct document posting for the membership was much appreciated.

3. Programme 2: Assist developing countries with respect to the application of standards

3.1. Technical assistance to establish a National Standardization Secretariat (NSS)

A set of guidelines for developing countries to establish a 'national standardization secretariat' charged with marshalling ICT standardization domestically and representing a country's interests in the international standardization work of ITU-T was published in 2014.

The "[Guidelines on the establishment of a National Standardization Secretariat \(NSS\) for ITU-T](#)", which are currently undergoing translation into the six official languages of the Union, respond to the extended mandate given by the revised Resolution 44.

The Guidelines present a step-by-step roadmap to the establishment of an NSS, spanning from the determination of the legal basis of the entity responsible for its management to best practices in the analysis of resource requirements and the creation of national-level standardization expert groups. Guidance is also offered on the responsibilities, leadership, membership and working methods of each committee or expert group comprising an efficient NSS. Countries wishing to set up the national standardization secretariat can contact TSB for technical assistance. Already Gambia has contacted TSB for technical assistance for establishing a national standardization secretariat.

3.2. Standards Q&A Forum

In September 2011, TSB launched the Standards Q&A forum¹ which allows anyone to send their queries regarding implementation of ITU-T Recommendations directly to the study group experts. It is an open forum allowing anyone to ask questions concerning standardization work, moderated

¹ <http://groups.itu.int/itu-t/StandardsQA.aspx>

by TSB's study group councillors. It offers a unique opportunity to engage with the experts that develop the standards that underpin ICTs. The Forum also offers a platform where exchange of information between developed and developing countries on application of ITU-T Recommendations can be facilitated.

4. Programme 3: Human resource capacity building

4.1. E-Learning Course on the Working Methods of ITU-T Study Groups

Resolution 44 revised during WTSA-12 in Dubai calls for the TSB Director to also consider using e-learning channels to diffuse information and knowledge about ITU-T Recommendations.

The [first in a series](#) of new ITU-T e-learning courses is now available on the [ITU Academy](#) platform. The course is based on [Recommendation ITU-T A.1](#) "Work methods for study groups of the ITU Telecommunication Standardization Sector", providing an introduction to the management structures, coordination mechanisms and operating procedures of ITU-T Study Groups.

The main objectives of the e-learning course are to introduce the structures, management, coordination mechanisms and operating procedures of ITU-T study groups as defined in Recommendation ITU-T A.1. Recommendation ITU-T A.1 describes general work methods for ITU-T study groups. The course is intended for delegates participating in ITU-T study group meetings, especially new participants. Each module is a self-contained unit, including course content and quizzes. After going through the course, participants need to take a final assessment online which upon scoring at least 80%; they can obtain a certificate of achievement.

An e-learning course on quality of service for mobile networks is under development in 2014 in collaboration with BDT.

4.2. Organization of seminars and workshops on ICT standardization

Regional BSG workshops were held: in 2011, in Fiji, Algeria and Moldova; in 2012, in Lao (P.D.R.) and India, as well as Regional ICT Standardization Forum in 2013 in Myanmar. A two-week tutorial on ITU-T Recommendations for Optical Fibres, Cables, and Systems took place in Mexico in September 2011, based on ITU-T's Handbook on Fibre Optic Cables.

One Regional ICT Standardization Forum for the Arab region was held on 27 January 2014 in Tunis. Three more regional standardization forums are planned in 2014 for other regions.

Tutorials targeting delegates and those in leadership positions in ITU-T study groups took place in 2012 in Geneva, Korea and Thailand, as well as a tutorial for the new study group and TSAG leadership teams in January 2013. ITU-T's first e-learning online course, a two-hour course on ITU-T A.1 (ITU-T's working methods) was launched in January 2014.

Four standardization tutorials were held namely in Malaysia, India, Fiji and Algeria. The standardization tutorials provided an interactive learning experience through a simulated study group meeting. The tutorial covered background information on how standardization works and how participants can increase their effectiveness in ITU-T meetings.

Workshops and capacity-building events were organized in close collaboration with BDT and BR, including ITU's Regional and Area Offices.

4.3. Fellowships to developing countries

The fellowship programme, available for eligible countries to attend meetings of any of the ten ITU-T study groups, finds strong resonance. The number of meetings in the regions continues to increase, and remote participation is now offered in all study group meetings.

ITU has facilitated participation in its meetings in a number of ways. Previously, partial fellowships were only available for ITU-T Study Group 3, now either one full fellowship or two partial fellowships are available for meetings of all ten study groups. The ITU fellowships are limited to countries with annual GDP per capita not exceeding USD 2000 as measured by the World Bank.

5. Fundraising for BSG

The voluntary fund to help bridge the standardization gap was established in August 2007 pursuant to WTSA-04 Resolution 44. Contributors include Nokia Siemens Networks, Microsoft, Cisco, and Korea. The Fund was used, *inter alia*, for supporting more events taking place in developing countries, including the tutorial on optical fibre cables and systems in Rwanda and Mexico. Funds were also used to provide fellowships to participants from developing countries to attend BSG Workshops and to develop technical manuals and reports.

A total amount of CHF 289,070 was received in the BSG Fund in 2010. Additional contributions from Canada and Microsoft were received in 2012 and 2013 respectively. The amount available in the BSG Fund at end of May 2014 is CHF 158,679.

6. Outcomes of World Telecommunication Development Conference - Dubai 2014 (WTDC-14)

ITU's sixth [World Telecommunication Development Conference \(WTDC\)](#) was held in Dubai, United Arab Emirates, from 30 March to 10 April 2014 under the theme of "Broadband for Sustainable Development".

The [Conference](#) endorsed relevant regional activities on bridging the standardization gap between developing and developed countries. Below is a list of major outcomes of the Conference related to bridging the standardization gap.

- The [Dubai Declaration](#) specifically asserted that "increased participation of developing countries in ITU activities to bridge the standardization gap is needed to ensure that they experience the economic benefits associated with technological development, and to better reflect the requirements and interests of developing countries in this area".
 - Fostering "the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap" was set as a specific Objective in the ITU-D Action Plan (Objective 2).
 - Resolution 47 on the enhancement of knowledge and effective application of ITU Recommendations in developing countries, was revised to stress of the usefulness of ITU guidelines on the application of ITU Recommendations.
 - A new ITU-D Recommendation was approved on bridging the standardization gap in association with regional groups of the study groups.
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