

Development of ITU-T Action Plans for New Study Period at WTSA-12

Hideo Imanaka and Yoshinori Goto

Abstract

WTSA, the World Telecommunication Standardization Assembly, is the highest-level assembly of the International Telecommunication Union, Telecommunication Standardization Sector (ITU-T). The most recent assembly, WTSA-12, was held in Dubai, United Arab Emirates (UAE), in November 2012. The purpose of the assembly was to develop the ITU-T action plans for the new study period from 2013 to 2016. Three Study Group vice-chairmen were elected from NTT. This article introduces the major results of WTSA-12.

1. Overview of ITU-T WTSA-12

1.1 Overview of WTSA

The organizational structure of the International Telecommunication Union (ITU), is illustrated in **Fig. 1**. Just as the three sectors of ITU, ITU-T (Telecommunication Standardization Sector), ITU-R (Radiocommunication Sector), and ITU-D (Development Sector), are placed under the General Secretariat, the high level conferences and assemblies are organized under the Plenipotentiary Conference, which is the highest-level meeting for decision making.

WTSA (World Telecommunication Standardization Assembly) is the assembly dealing with ITU-T matters. Similarly, WTDC (World Telecommunication Development Conference) and RA (Radiocommunication Assembly) are associated with ITU-D and ITU-R, respectively. In addition, WRC (World Radiocommunication Conference) is held to discuss the international assignment of radio frequencies, and WCIT (World Conference on International Telecommunication) is held to discuss the International Telecommunication Regulations (ITRs).

WTSA is held every four years to discuss issues concerning Study Group (SG) structure, the appointment of SG chairmen and vice-chairmen, the approval of Recommendations requiring a decision at a higher level than the SG, and the development and revision of Resolutions. Because of the importance of

the issues to be dealt with, regional preparatory meetings, which typically get started two years before the WTSA, are organized in order to coordinate the regional opinions of all six member regions. Japan belongs to the Asia-Pacific region, so delegates from Japan attend the Asia-Pacific regional preparatory meetings organized by the Asia-Pacific Telecommunity (APT). APT was established to support the development of telecommunication industries in the Asia-Pacific region through the participation of 38 countries including Japan, as shown on the right side of **Fig. 1**.

The WTSA-12 preparatory meeting in APT consisted of four Working Groups (WGs); one of the groups discussed SG structure and was led by one of the authors, Mr. Goto, as a rapporteur. As shown on the right side of **Fig. 1**, the APT common proposals were made from the results of preparatory meeting discussions. These common proposals were submitted to WTSA-12 representing the common opinions from the 38 countries in APT. There were 14 APT common proposals presented at WTSA-12.

1.2 Structure of WTSA-12

Around 700 people from 102 countries participated in WTSA-12 [1] held in Dubai, United Arab Emirates (UAE), from November 20–30, 2012. There were 32 Japanese delegates, including 6 from the NTT group.

Because of the wide range of discussion topics, five committees were organized to address specific topics

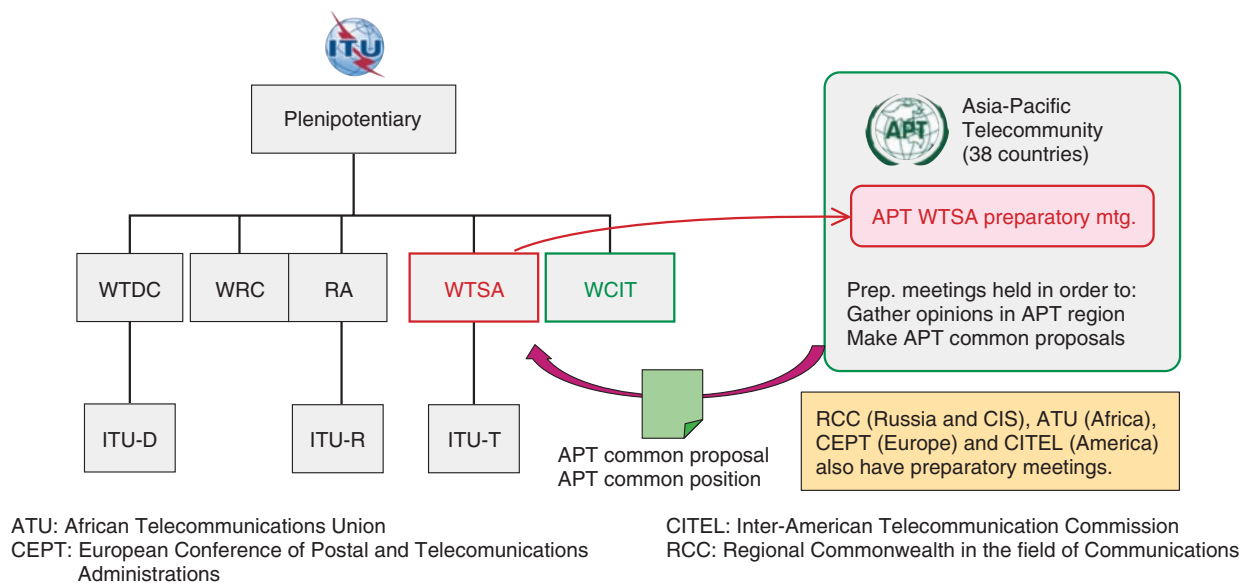


Fig. 1. Positioning of WTSA and preparatory meeting within APT.

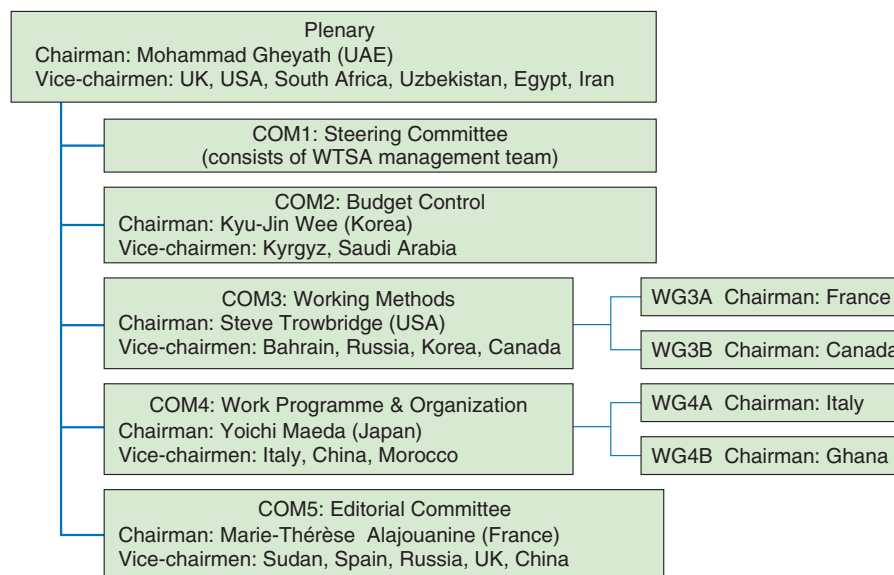


Fig. 2. Structure of WTSA-12.

under a Plenary that was led by the UAE, as shown in **Fig. 2**. Committee 4, referred to as Com4, was responsible for discussing SG structure and important issues for ITU-T organizations of standardization work, and was chaired by Mr. Yoichi Maeda of the Telecommunications Technology Committee (TTC) of Japan. Since Com4 dealt with more than half of all contributions submitted to WTSA-12, two WGs were created under Com4 to discuss issues separately. In

addition, several ad-hoc groups were set up that discussed inconclusive issues of WGs. Active discussions were continued from early morning to midnight throughout the weekend of the conference.

At this WTSA, discussions were also held on issues concerning numbering associated with the revision of ITRs that would be discussed at WCIT held just after WTSA.

2. SG structure and chairmen and vice-chairmen

2.1 SG structure

At the previous WTSA in 2008, the merger of SGs was discussed. The current structure of 10 SGs resulting from WTSA-08 was the outcome of transferring the mandates of SG6 and 19 to SG15 and 13, respectively, while splitting the mandates of SG4 between SG2 and 15. At WTSA-12, the APT proposed maintaining the current 10 SGs in recognition of the leading role of ITU-T in the global standardization of information and communications technology (ICT). This proposal gained support from other regions and countries including Africa, the Arab region, and Russia, while the European region showed their preference for reducing the number of SGs. It was agreed to keep the current 10 SGs.

The European region also proposed merging, deleting, and/or transferring low activity Questions. Delegates familiar with the situations of the Questions provided some explanations and justification for maintaining them. It was agreed to keep the structure as proposed by the SGs, and it was also agreed to request the SG in question to report the measures they would take to enhance their activities in order to justify the continuation of such Questions at the TSAG (Telecommunications Standardization Advisory Group) meeting in 2014.

2.2 Mandate of SGs

Several proposals regarding study areas in the next study period were made from delegates from APT and other regions. These proposals were considered

for the revision of Resolution 2, which describes new mandates for each SG. WTSA also adopted a new resolution on Software Defined Networking (SDN) that was proposed by APT. The aim of this new resolution is to encourage the study of SDN by ITU-T and to highlight the work of SG13 (Future Networks).

The APT common proposal, led by Japan, proposed assigning new study areas such as disaster-related issues and interoperability testing to the appropriate SGs and was basically agreed. The issue on sharing security work in cloud computing was discussed intensively, primarily between the USA and Russia involving the chairmen of the SGs in question. It was confirmed that the current responsibilities would be maintained; that is, SG17 is the lead SG on security issues, and SG13 is the lead SG on cloud computing. However, the discussion on the responsibilities concerning the security aspects of cloud computing was to be continued between the relevant parties until the TSAG meeting in 2013.

These results were reflected in the revised Resolution 2 and adopted at the plenary meeting.

2.3 Chairmen and vice-chairmen of SGs

Resolution 35, which specifies the terms of chairmen and vice-chairmen of SGs, was also adopted in this WTSA. At the Head of Delegation meeting, which was an unofficial meeting called by the ITU-T Secretariat Bureau and held during the latter half of WTSA-12, 16 chairmen including 10 SG chairmen and 6 regional tariff group chairmen, and 107 vice-chairmen were elected. From Japan, 3 chairmen and 8 vice-chairmen, including 3 people from NTT, were elected. The new SG chairmen are listed in **Table 1**,

Table 1. Newly elected SG chairmen, and vice chairmen from Japan.

SGs	Chairmen	Vice-chairmen from Japan
TSAG (work plan)	Bruce GRACIE (Canada)	
Review committee	Yoichi MAEDA (TTC, Japan)	
SG2 (Operation)	Sherif GUINENA (Egypt)	
SG3 (Economic issues)	Seichi TSUGAWA (KDDI, Japan)	
SG5 (Environment)	Ahmed ZEDDAM (France)	
SG9 (CATV)	Arthur WEBSTER (US)	Satoshi MIYAJI (KDDI)
SG11 (Protocols)	Wei FENG (China)	Kaoru KENYOSHI (NEC)
SG12 (Quality)	Kwame BAAH-ACHEAMFOUR (Ghana)	Akira TAKAHASHI (NTT)
SG13 (Future Networks)	Chae-Sub LEE (Korea)	Yoshinori GOTO (NTT)
SG15 (Transport Networks)	Steve TROWBRIDGE (USA)	Noriyuki ARAKI (NTT)
SG16 (Multimedia)	Yushi NAITO (Mitsubishi, Japan)	
SG17 (Security)	Arkadiy KREMER (Russia)	Koji NAKAO (KDDI)

along with the vice-chairmen elected from Japan.

From NTT, Mr. Akira Takahashi of Network Technology Laboratories was elected vice-chairman of SG12, Quality of Services, Mr. Yoshinori Goto, one of the authors and also of Network Technology Laboratories, was elected vice-chairman of SG13, Future Networks, and Mr. Noriyuki Araki of Access Service Systems Laboratories was elected vice-chairman of SG15, Access and Transport Networks.

3. Overview of other results

3.1 Approval of important Recommendations

At WTSA, ITU-T Recommendations that were controversial and difficult to approve at the SG level were discussed for approval, and six Recommendations were approved in WTSA-12. In particular, the Recommendations concerning MPLS-TP (multiprotocol label switching transport profile: technologies for highly reliable packet transport networks with the same functionalities and performance as existing transport networks through the use of MPLS), G.8113.1 and G.8113.2, were among such Recommendations. Consequently, the IANA (Internet Assigned Number Authority) assigned code points for these Recommendations. These Recommendations on MPLS-TP have been discussed intensively by ITU-T and IETF (Internet Engineering Task Force) for eight years. NTT has actively contributed to completing these Recommendations.

3.2 Establishment of Review Committee

To facilitate more efficient studies in the future study period starting in 2017, the establishment of a Review Committee (RevCom) was proposed by Japan and agreed. This group will discuss SG structure and coordinate their efforts with other standards developing organizations (SDOs) to minimize conflict of other standards with ITU-T standards. Mr. Maeda, who is the secretary general of TTC and who formerly worked for NTT, was elected as the chairman of this group.

3.3 Adoption of major resolutions

- Resolution on e-Health

The Arab region proposed a new resolution for pushing forward e-Health standardization. Although the USA opposed this for reasons involving the protection of private data of patients, the new resolution was adopted as Resolution 78 with a note recognizing the importance of privacy protection.

- Resolution on SDN

APT proposed a new resolution for SDN. Some countries such as the USA and the UK expressed views that this new resolution was not necessary because SG13 had already initiated discussions on this topic. Japan expressed the view that this new resolution would increase the visibility of SDN studies in ITU-T. As a result, this new resolution was adopted as Resolution 77.

China proposed the establishment of a new focus group for SDN. This was not accepted due to overlap with SG13. The plan for a workshop on SDN was included into this resolution in order to coordinate efforts with ITU-T and other SDOs and to advance the visibility of ITU-T SDN work.

- Resolution on e-Waste

The Arab region proposed a new resolution on e-Waste, i.e., waste electrical and electronic equipment. The UK and France opposed this proposal since Resolution 73, which addresses ICT and climate change, covers e-Waste issues, and SG5 is already studying this area. After the discussion, this proposal was agreed and adopted as Resolution 79 to express the active position of ITU-T on the standardization of e-Waste.

4. Future plans

At WTSA-12, the action plan, which includes the structure of standardization work within ITU-T in the study period from 2013 to 2016, was determined. Three people from NTT were elected as vice-chairmen of important SGs; thus, NTT will continue to have a major influence on the standardization work of ITU-T.

However, the Arab and African regions offered many comments at WTSA-12, which was held in the Middle-East, and therefore, developing countries can be expected to participate more actively in ITU-T standardization work in the near future.

From an NTT Group point of view considering the deployment of NTT solutions to developing countries, NTT would like to strive to continue participating in standardization activities in order to spread NTT technologies globally and to foster relationships with developing countries through ITU-T management team and ITU-D and ITU-R activities.

Reference

- [1] <http://www.itu.int/en/ITU-T/wtsa12/Pages/default.aspx>



Hideo Imanaka

Senior Manager, R&D Planning Department, NTT.

He received the B.E., M.E., and Ph.D. degrees in electrical engineering from Mie University in 1985, 1987, and 2001, respectively. After joining NTT Telecommunication Network Laboratories in 1987, he engaged in research on fiber optic access network architecture and network operation process reengineering methods. From 1996 to 2003, he worked on enterprise resource planning (ERP) system integration as a consultant in the Solutions Business Division of NTT Communications. Since 2004, he has been involved in NGN standardization work at ITU-T. He was the Rapporteur of Question 1 of Study Group 13 from 2007–2010. He has also played an active role in IPTV standardization work at ITU-T. He is currently in charge of standardization strategies in the NTT Group. He received the ITU-AJ Award from the ITU Association of Japan in 2009. He is a member of the Institute of Electronics, Information and Communication Engineers (IEICE) and the Society of Instrument and Control Engineers.



Yoshinori Goto

Senior Research Engineer, Network Technology Project, NTT Network Technology Laboratories.

He received the B.E. and M.E. degrees in applied physics from Tohoku University, Miyagi, in 1992 and 1994, respectively. He joined NTT Basic Research Laboratories in 1994. He has been involved in R&D of cable television systems, IPTV, and M2M. Since 2006, he has been engaged in the standardization work for IPTV in ITU-T as a member of the-IPTV Focus Group (FG-IPTV) and Global Standards Initiative (IPTV-GSI). He has also served as Rapporteur of Question 11 of ITU-T SG9, Questions 5 and 25 of ITU-T SG13, and Question 21 of ITU-T SG16. At WTSA-12, he was appointed as a vice-chairman of ITU-T SG13. He is a member of IEICE.
