

Report of ASTAP-25 and 1st APT Preparatory Meeting for WTSA-16

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Abstract

The 25th meeting of the Asia-Pacific Telecommunity (APT) Standardization Program (ASTAP), which refers to the regional standardization activities of APT, was held in Bangkok in March 2015. This article reports the major outcomes of this ASTAP meeting, including the new structure of ASTAP, results of discussions on networks and systems, which are of interest to telecom operators, and the preparatory activities for the WTSA (World Telecommunication Standardization Assembly) meeting to be held in 2016.

Keywords: APT, ASTAP, WTSA-16

1. Introduction

The Asia-Pacific Telecommunity (APT) is an international organization promoting the development of telecommunication services and infrastructure in the Asia-Pacific region. Currently, 38 countries are members of APT, and there are also 4 associate members and 131 affiliate members. APT serves as a platform for carrying out preparatory activities for making regional common proposals for high level conferences and assemblies of the International Telecommunication Union (ITU) such as the ITU Plenipotentiary Conference, and it plays an important role in promoting the voicing of member opinions in this region. In addition to the preparatory activities for high level conferences and assemblies of ITU, APT also conducts regional standardization work through ASTAP (Asia-Pacific Telecommunity Standardization Program) activities [1]. ASTAP usually holds two plenary meetings every year. The meeting in March 2015 was the 25th meeting.

2. Structure of ASTAP

Previously, ASTAP was a two-layer structure in which all the Working Groups (WGs) and Expert Groups (EGs) were positioned at the same level under the top plenary level. Although this structure was

advantageous in its simplicity, it resulted in many output documents being brought into the plenary meeting without having been examined by a wider group of participants. Therefore, a lot of time was usually needed at the plenary meeting to clarify several points. It was pointed out that this structure could be improved by introducing an intermediate process between the EGs and the plenary meeting to sort out minor contentious issues. The new structure consists of three layers: the plenary meeting, WGs, and EGs (**Fig. 1**). The actual technical discussions take place in the EGs, and the WGs then check all of the output documents so they are ready for presentation at the plenary meeting, where decisions about them are made. With this new structure, the plenary meeting is reserved for strategic discussions and decision-making.

Three WGs, namely, those for Policy and Strategic Coordination (WG PSC), Network and System (WG NS), and Service and Application (WG SA), were established to respectively address policies and regulations, network infrastructure, and service issues. This structure of the WGs is aligned with the structure of the Telecommunication Standardization Sector of ITU (ITU-T) Study Groups (SGs), which enables efficient collaboration with ITU-T.

Twelve EGs are positioned under the WGs, and they conduct detailed technical discussions on

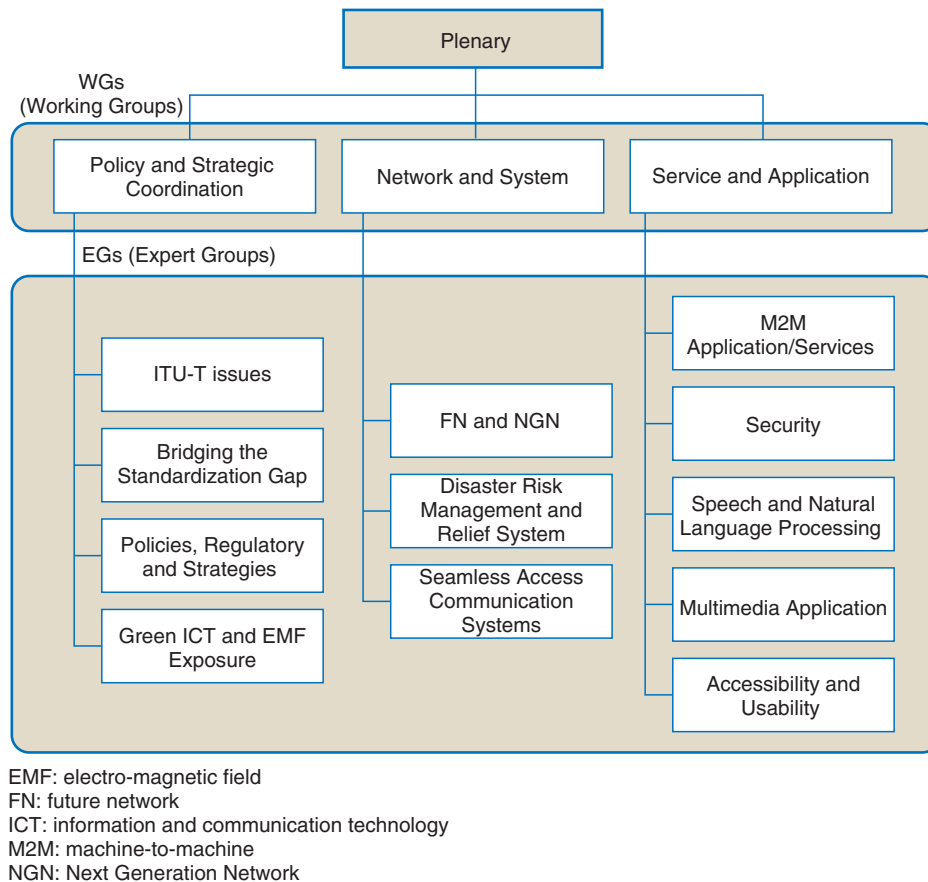


Fig. 1. The structure of ASTAP.

relevant issues. Many of the EGs are a continuation of former EGs in the previous structure, while minor adjustments were made to some of the EGs in order to align them with current activities. In today's international standardization efforts, most standardization work is conducted in global standardization bodies such as ITU-T. To complement such global activities, ASTAP focuses on information exchanges and regional activities utilizing global standards such as technical trials rather than establishing its own regional standards that might compete with global ones. Many Asian countries are coming late to the global standardization table, and their presence is still weak, although Japan, China, and Korea are increasingly influential. Assisting these newer members to be global players in standardization activities not only benefits them but also benefits us by creating future partners in global standardization.

3. Network system

This part mainly reports the activities of WG NS and the Expert Group on Future Network and Next Generation Network (EG FN&NGN), in which NTT is active. As a regional standardization body, ASTAP is responsible for establishing a regional coordination mechanism in the Asia-Pacific region for the World Telecommunication Standardization Assembly (WTSA). This coordination mechanism was utilized when the standardization of Multiprotocol Label Switching-Transport Profile (MPLS-TP)—a highly reliable packet transport technology—was debated in ITU-T. NTT played a leading role in coordinating the APT common proposal to WTSA-12 by bringing a contribution co-signed by Japan, China, and Korea to the APT preparatory meeting for WTSA-12. The draft recommendations on MPLS-TP were brought to WTSA due to a particular difficulty in obtaining approval for them via the usual approval procedure utilizing the SG meeting of ITU-T, and they were

Table 1. Structure, chairs, and vice-chairs of APT preparatory meeting for WTSA-16.

Plenary/WGs	Chairs/Vice-chairs	
Plenary	Chair	Mr. Yoichi Maeda (TTC, Japan)
	Vice-chairs	Dr. Hyoung Jun Kim (Korea)
		Ms. Weiling Xu (China)
WG1 Working Methods	Chair	Mr. Kaoru Kenyoshi (NEC, Japan)
	Vice-chair	Mr. Muhammad Neil El Himan (Indonesia)
WG2 Work Organization	Chair	Dr. Seungyun Lee (Korea)
	Vice-chairs	Mr. Noriyuki Araki (NTT, Japan)
		Mr. Abdul Karim Abdul Razak (Malaysia)
WG3 Standardization Issues	Chair	Mr. Si Xianxiu (China)
	Vice-chairs	Ms. Michiko Fukahori (NICT, Japan)
		Dr. Seyed Mostafa Safavi (Iran)
		TBD (Vietnam)

successfully approved. The approved recommendations on MPLS-TP are now ready to use as international standards.

Furthermore, NTT led the proposal on the vision of the next generation highly reliable packet transport technology including the network structure, implementation, and operation to ASTAP in collaboration with China Mobile and ETRI in Korea. The proposal was approved as an APT report by which NTT's vision of the next generation transport network is shared by other members in the Asia-Pacific region.

WG NS and EG FN&NGN have launched new study items on cloud computing and NFV (network function virtualization) in order to make communication and the processing of information more efficient, taking into account the advent of big data, and to encourage the development of related technologies and information-sharing among countries in the Asia-Pacific region. At this ASTAP meeting, NTT submitted contributions on advanced transport technologies for future flexible and high quality services such as advanced MPLS-TP packet transport network technology suitable for high resolution video distribution such as 4K and 8K, transport software-defined networking (SDN) utilizing SDN technology for transport networks to realize network virtualization, and high resolution time synchronization technology to be used for high quality mobile services and applications. These proposals were accepted as a work plan for further discussion including a survey in the Asian region, and were recognized as important ASTAP study items.

4. First APT preparatory meeting for WTSA-16

The first APT preparatory meeting for WTSA-16 was held after ASTAP-25. WTSA is the highest-level meeting of ITU-T and addresses strategic issues including SG restructuring. This preparatory work in APT is important for a member state to be successful at the WTSA because its proposals can gain the support of 38 APT countries by making an APT common proposal. The negotiating power of an APT common proposal is so high that the proponents of APT common proposals can debate issues equally with other regions such as North America, Europe, the Middle East, and Africa. The delegations of this preparatory meeting recognize this particular benefit and try to coordinate their opinions for presentation at WTSA.

This meeting is the first meeting for WTSA-16. Therefore, the major issues were the appointment of a chair and vice-chairs, the approval of a group structure including WGs, and the appointment of the chairs and vice-chairs of the WGs.

Mr. Maeda of the Telecommunication Technology Committee (TTC) was appointed as the chairman of the preparatory meeting, which consists of the plenary and three WGs. WG1 is responsible for establishing the ITU-T work method. WG2 is responsible for organizing the ITU-T work, including SG restructuring. WG3 is responsible for discussing standardization-related issues including policies and regulatory issues. The structure of the APT preparatory meeting for WTSA-16 and the appointed chairs and vice-chairs are indicated in **Table 1**. In the agreed structure, Japan, China, and Korea lead as chairs and vice-chairs of the plenary and WGs. This balanced

structure among the major countries in the region encourages coordination. The participants of the preparatory meeting will work on producing APT common proposals, taking into account the discussions of TSAG (Telecommunication Standardization Advisory Group) and the Review Committee. The second meeting is planned for October 2015.

Reference

- [1] APT/ASTAP/REPT-14: APT Report on Packet Transport Networks, Aug. 2014.
<http://www.apr.int/APTASTAP-OUTCOMES>



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He received his B.E. and M.E. in applied physics from Tohoku University, Miyagi, in 1992 and 1994. He joined NTT Basic Research Laboratories in 1994. He has been researching and developing cable television systems, Internet protocol television (IPTV), and M2M technology. He has been engaged in the standardization work for IPTV in ITU-T as a member of the-IPTV Focus Group and Global Standards Initiative since 2006. 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 WTS-12, he was appointed as a vice-chairman of ITU-T SG13. He is a member of the Institute of Electronics, Information and Communication Engineers (IEICE).



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He received his Ph.D. in electrical engineering from the University of Tokyo in 2009. He joined NTT in 1988 and initially engaged in R&D of long haul transmission systems using optical amplifiers and coherent modulation/demodulation schemes. He also worked on the development and deployment of a commercial optically amplified submarine system and conducted R&D of wavelength division multiplexing. He has been an active participant in ITU-T SG15 since 2003. He is currently the chairman of the transport networks and electromagnetic compatibility WG in TTC. He received the Accomplishment Award from ITU-AJ in 2015 and the Distinguished Service Award from TTC in 2015.



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He received his B.E. and M.E. in electrical and electronic engineering from Sophia University, Tokyo, in 1993 and 1995, respectively. He joined NTT Access Network Service Systems Laboratories in 1995. He then worked on the research and development (R&D) of operation and maintenance systems for optical fiber cable networks. Since 2006, he has been engaged in work on outside plant standardization in ITU-T SG6. He was the Rapporteur of Question 6 of ITU-T SG6 from 2006 to 2008, and the Rapporteur of Question 17 of ITU-T SG15 from 2008 to 2012. He served as the Chairman of ITU-T FG-DR&NRR (Focus Group on Disaster Relief Systems and Network Resilience and Recovery). He has been the vice-chairman of ITU-T SG15 since 2013. He also contributes to the activities of IEC (International Electrotechnical Commission) Technical Committee 86 (fibre optic systems). He received the ITU-AJ award from the ITU Association of Japan in 2012. He is a member of IEICE.