Meeting Report of the 31st Asia-Pacific Telecommunity Standardization Program (ASTAP-31) and the Asia-Pacific Telecommunity (APT) Preparatory Meeting for WTSA-20

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Abstract

The 31st Asia-Pacific Telecommunity Standardization Program (ASTAP-31) was held in Tokyo in June 2019 with the aim of strengthening standardization activities in the information and communication technology field in the Asia-Pacific Telecomunity (APT) and contributing to the regional formulation of international standards. This article reports the results of ASTAP-31 and the status of the first APT preparatory meeting for WTSA (World Telecommunication Standardization Assembly) planned in 2020.

Keywords: ASTAP, WTSA, ITU-T

1. The 31st Asia-Pacific Telecommunity Standardization Program (ASTAP) meeting

The Asia-Pacific Telecomunity (APT) was established in 1979 and is an international organization promoting the development of information and communication technology (ICT) in the Asia-Pacific region. It currently has 38 member countries. ASTAP consists of an APT standardization committee that meets every 10 months or so. The 31st ASTAP meeting (ASTAP-31) was held in Tokyo (Akihabara) in June 2019. The Ministry of Internal Affairs and Communications (MIC) of Japan hosted this meeting with the support of NTT and other Japanese member companies in order to strengthen cooperation with major Asian countries and coordinate proposals reflecting Japan's opinions. The meeting had 108 participants from 20 countries. The meeting opened with speeches given by Ms. Areewan Haorangsi, APT Secretary General, and Ms. Yukari Sato, then State Minister of MIC, who spoke on behalf of the host country.

2. First APT preparatory meeting for World Telecommunication Standardization Assembly 2020 (WTSA-20)

The first meeting of the APT Preparatory Group for WTSA-20 (APT WTSA-20) was held in conjunction with ASTAP-31. WTSA-20 is one of the most important meetings of the International Telecommunication Union - Telecommunication Standardization Sector (ITU-T). The purpose is to decide the study group structure of ITU-T, the chair and vice-chair of each study group, and the study theme on the latest technology such as artificial intelligence and Internet of Things (IoT) in the study period from 2021 to 2024.

In WTSA deliberations, it is common to divide the world into six regions (Asia and the Pacific, the

Table 1. Structure of APT WTSA-20.

Organization / Working Group (WG)	Chair	Vice-chair
APT WTSA-20	Mr. Yoichi Maeda (TTC, Japan)	Dr. Hyoung Jun Kim (Korea) Mr. Xu Heyuan (China) Mr. Arvind Chawla (India)
WG1: ITU-T Working methods	Dr. Kangchan Lee (Korea)	Ms. Miho Naganuma (NEC, Japan) Mr. Ashutosh Pandey (India) Proposed (China)
WG2: ITU-T Work organization	Mr. Noriyuki Araki (NTT, Japan)	Mr. Nguyen Van Khoa (Vietnam) Mr. P. K. Singh (India) Proposed (Korea) Proposed (China)
WG3: Regulatory/policy and standardization related issues	Dr. Cao Jiguang (China)	Ms. Eriko Hondo (KDDI, Japan) Ms. Arezu Orojlu (Iran) Mr. Premijit Lal (India) Ms. Nguyen Thi Khanh Thuan (Vietnam)

Americas, Europe, Russia (Commonwealth of Independent States), the Arab states, and Africa) and to have common proposals for each region. This is done to improve the efficiency of consensus building. Therefore, the APT WTSA-20 preparatory meetings are crucial for discussing the course of action for WTSA-20. For example, if we try to reflect Japan's proposals, it will be possible to negotiate with other regions at the regional level by making them an APT common proposals as the Asia-Pacific region.

This was the first meeting leading up to WTSA-20, and the selection of the APT WTSA-20 chair, vice-chair, and other officials in charge of the management of the meeting and approval of the meeting structure were made. The structure of the APT WTSA-20 is indicated in **Table 1**. Mr. Yoichi Maeda, chief executive officer and senior vice president of the Telecommunication Technology Committee (TTC), was elected as chair of APT WTSA-20. In addition, three Working Groups (WGs) were established to discuss ITU-T working methods (WG1), ITU-T work organization (WG2), and regulatory/policy and standardization related issues (WG3). Japan has established a strong support system to reflect its intentions, with three members from Japan selected as the chair or vice-chair of the WGs to promote substantive discussions at meetings. In the future, discussions toward an agreement on the APT common proposals will be held at the preparatory meetings, taking into account the trend of discussions held in ITU-T Telecommunication Standardization Advisory Group (TSAG).

3. Industry workshops

An industry workshop was held on the afternoon of the first day of the meeting. Seven speakers from four countries gave lectures on disaster response ICT in the first half and smart cities and IoT in the second. The industry workshop programs are listed in **Table 2**. Promising items for future study in the Expert Groups (EGs) of ASTAP were reported at this workshop.

4. Organizational structure of ASTAP

The structure of ASTAP and the respective office bearers are shown in **Fig. 1**. ASTAP consists of 11 EGs and 3 WGs that organize EGs by technical field. Substantial technical discussions are conducted by each EG, and the outcome documents from each EG are approved by the WG and then finally discussed at the ASTAP Plenary so that efficient discussions can be conducted at each meeting level.

5. Main results of ASTAP-31

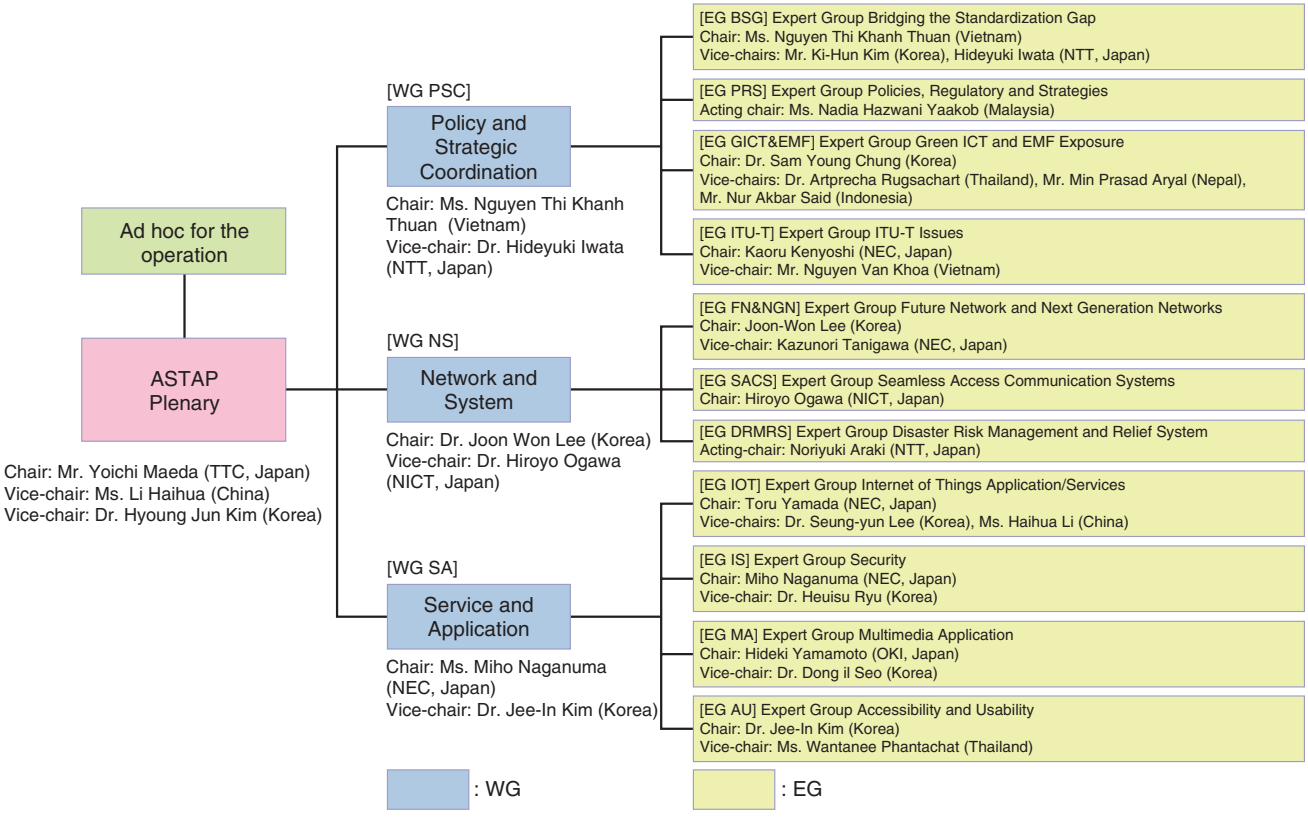
At the ASTAP meeting, 11 APT reports, 1 guideline document, 4 survey questionnaires, and 3 liaison statements to other standardization bodies were approved. The main output documents are listed in **Table 3**.

In the EG DRMRS (Disaster Prevention and Recovery System) session, the discussion progressed on the technical report on the use cases of portable emergency communication systems that had been studied based on the proposal from NTT. The use case of portable ICT resource units (MDRU: movable and deployable ICT resource units) [1] during the 2016 Kumamoto earthquake was incorporated into the APT report. The APT report was finally approved

Table 2. Industry workshop programs.

Opening Remarks: Ms. Yuki Naruse (NICT, Japan) Workshop program committee member
Part I: Disaster Response Chair: Dr. Seungyun Lee, ETRI, Korea
●Development of Unmanned Aerial Vehicle Sensor-based Smart Eye Technology for Local Disaster Monitoring and Situational Response by Dr. Yong-Tae Lee, ETRI, Korea ●About V2X that Utilized Route Bus in Kobe by Mr. Yasuo Oishi, Honda Motor Co., Ltd., Japan ●Disaster Resilient Communications and Information Systems using the New V-Hub Standard by Prof. Gregory L. Tangonan, Ateneo de Manila University, Philippines
Part II: Smart Cities and IoT Chair: Mr. Kaoru Kenyoshi, NICT, Japan
●Smart City and IoT Projects of ASEAN IVO by Dr. Hiroshi Emoto, NICT, Japan ●NEC's Smart City Solutions Employed in APT Member Countries by Dr. Toru Yamada, NEC Corporation, Japan ●Tuberculosis Laboratory Data System in Myanmar by Dr. Ikuma Nozaki, Bureau of International Health Cooperation, National Center for Global Health and Medicine, Japan ●5G Internet of Vehicle Outlook and Practice by Dr. Chen Xiao, ZTE Corporation, China

ASEAN: Association of Southeast Asian Nations
ASEAN IVO: ICT Virtual Organization of ASEAN Institutes and NICT
ETRI: Electronics and Telecommunications Research Institute
5G: fifth-generation mobile communications
NICT: National Institute of Standards and Technology
V2X: vehicle-to-everything



EMF: electromagnetic field

Fig. 1. Structure of ASTAP and office bearers.

Table 3. Main output documents approved at ASTAP-31.

WG	Document title
WG PSC	Handbook to Introduce ICT Solutions for the Community in Rural Areas
	Report on Regulatory Matters and Implementation Practices of Quality of Experience in Mobile Communications
	APT Report on Efforts to Achieve Green Data Centers in the ICT/telecommunications Sector in APT Member Countries
	APT/ASTAP Report on EMF Information Platform
	Asia-pacific Regional Activities on Human Exposure to EMF (Ed.1)
	Questionnaire to Collect Data on the Measurement Scenarios and Sampling Methodologies to Assess Quality of Popular Mobile Services
	Questionnaire on Compliance Label of Communication Devices
	Questionnaire for Requirements on ICT Standardizations
	Liaison Statement to SG11 to Share Information on Combating Counterfeit and Stolen Mobiles
WG NS	Draft APT Report on Case Studies for Portable/Movable Emergency Telecommunication System in APT Region
	Draft New APT Report on Field Trial of Wireless Access WDM-PON Deployment based on Radio over Fiber Technology
	Draft New APT Report on Power over Fiber System for Radio over Fiber Network
	Draft New APT Report on Broadband Railway Communication Systems Using Radio over Fiber Technologies
	Draft New APT Report on Description of Radio over Fiber Technologies for Seamless Access Communication Systems
	Draft Liaison Statement to ITU-T SG15
WG SA	The Security Guideline: Guidelines for Secure Use of IT Devices and Services (Version 2)
	APT Report "Harmonization of S2ST (Speech-to-Speech Translation) Standardization"
	Draft Questionnaire for Traffic Accident Record and Its Analysis Method's Guidelines in Asia-Pacific Region
	Liaison Statement to ITU-T SG16 Q21and Q24 and ISO/IEC JTC1 SC35/WG5: Approval of APT Report "Harmonization of S2ST Standardization"

IEC: International Electrotechnical Commission
ISO: International Organization for Standardization
IT: information technology
JTC1: Joint Technical Committee 1
Q: question
WDM-PON: wavelength division multiplexing passive optical network

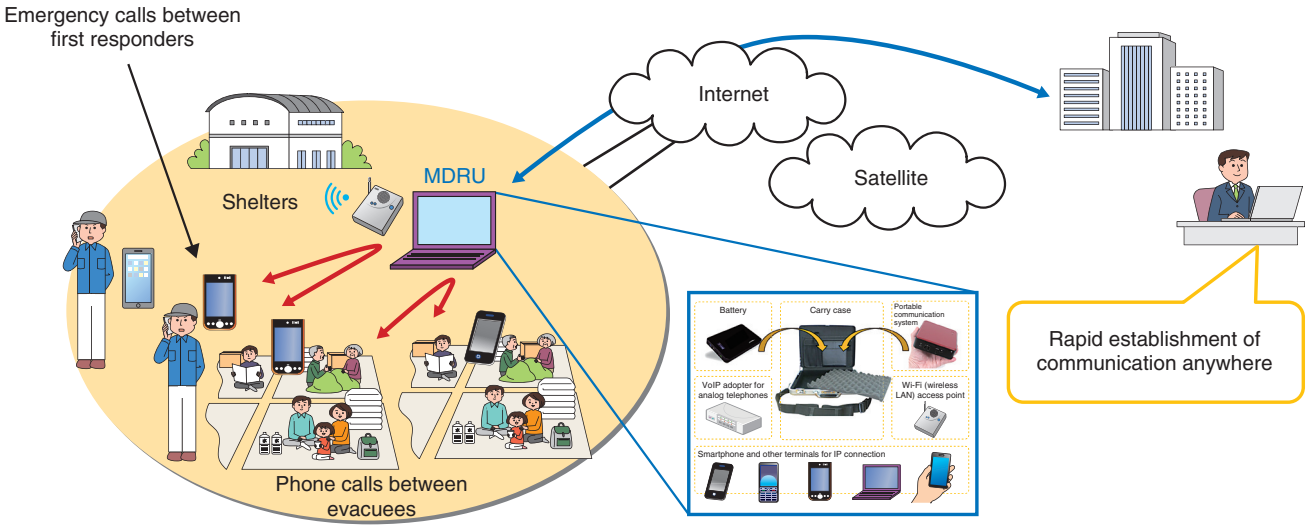
by adding the examples of emergency communication systems in China and the Philippines, and the standardization status of disaster response ICT related technology and communication services in other standardization organizations such as ITU (**Fig. 2**). In the future, it is expected that the use of portable emergency communication systems such as MDRUs will expand in the Asia-Pacific region.

In addition, it was reported that the Information and Communication System using Vehicle during Disaster (V-HUB), of which the APT Recommendation process had been agreed to move forward with at the previous ASTAP-30 meeting, was approved as an APT Recommendation at the 41st APT Management Committee meeting held in October 2018. The voting requirement for an APT Recommendation is that a 25% majority (10 countries) of votes in favor of the Recommendation is received by member countries, and there is no opposition from 2 or more countries.

In the EG ITU-T (ITU-T Issues) session, APT member countries, including developing countries, share information and reports on the latest standardization topics, technical trends, and deliberation status in each study group (SG) of the ITU-T. All the SGs of ITU-T gave presentations this time, and APT member countries were able to share information on the current status of each SG and new issues for discussion at WTSA-20.

6. Future plans and issues

ASTAP is a meeting to promote standardization activities in the APT region. The ASTAP chairman is from Japan, and the Japanese delegates are office bearers in many of the WGs and EGs. The participants from NTT and Japan also play leading roles in the deliberations of technical documents. Japan is a major country in the APT; and thus, expectations and trust in Japan are extremely high. In a large-scale international standardization conference such as WTSA-20, proposals as a region rather than an individual country are often emphasized, so it is important to always show a presence in the APT region and to deepen cooperation with APT members. For ITU-T, ASTAP as well as APT preparatory meetings will be a valuable opportunity for this purpose. The next



LAN: local area network
IP: Internet protocol
VoIP: voice over IP

Fig. 2. Features of attaché case type MDRU.

APT WTSA-20 preparatory meeting will be held in April 2020, and the 32nd ASTAP meeting will be held in May or June 2020.

Reference

[1] T. Sakano, S. Kotabe, and T. Komukai, "Overview of Movable and Deployable ICT Resource Unit Architecture," NTT Technical Review, Vol. 13, No. 5, 2015.
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He received a B.E. and M.E. in electrical and electronic engineering from Sophia University, Tokyo, in 1993 and 1995. He joined NTT Access Network Service Systems Laboratories in 1995, where he researched and developed operation and maintenance systems for optical fiber cable networks. He has been contributing to standardization efforts in ITU-T SG6 since 2006. He was the Rapporteur of Question 6 in ITU-T SG6 from 2006 to 2008 and the Rapporteur of Question 17 in ITU-T SG15 from 2008 to 2012. He also served as the chairman of the ITU-T Focus Group on Disaster Relief Systems and Network Resilience and Recovery. He has been a vice-chair of ITU-T SG15 since 2013. He also contributes to the activities of the International Electrotechnical Commission (IEC) TC86 (Technical Committee 86: Fibre optics). He received the ITU-AJ Award from the ITU Association of Japan in 2012. He is a member of the Institute of Electronics, Information and Communication Engineers.

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He received a Ph.D. in electrical engineering from Yamagata University in 2011. From 1993 to 2000, he conducted research on high-density and aerial optical fiber cables at NTT Access Network Service Systems Laboratories. Since 2000, he has been responsible for standardization strategy planning for NTT research and development. He has been a delegate of IEC Subcommittee 86A (optical fiber and cable) since 1998 and of ITU-T TSAG since 2003. He is a vice-chair of the Working Group on Policy and Strategic Coordination and the Expert Group on Bridging the Standardization Gap in ASTAP. He received an award from the IEC Activities Promotion Committee of Japan in 2004, the ITU-AJ International Activity Encouragement Award in 2005, an ITU-AJ International Cooperation Award in 2012, an award for contributions to an ICT development project at the APT ICT Ministerial Meeting in 2014, the ITU-AJ Accomplishment Award in 2018, and the TTC Chairman's Prize in 2019.