

Report on the 36th Asia-Pacific Telecommunity Standardization Program Forum (ASTAP-36)

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Abstract

The 36th Asia-Pacific Telecommunity Standardization Program Forum (ASTAP-36) was held on May 20–24, 2024 in Bangkok, Thailand. More than 150 experts (including 39 remote participants) from 18 nations/regions gathered for four days of standardization discussions and industry workshops. This article outlines the key points of ASTAP-36.

Keywords: APT, ASTAP, industry workshop

1. Overview and structure of ASTAP

The international organization Asia-Pacific Telecommunity (APT) was established in 1979 to promote information and communication technology (ICT) development in the Asia-Pacific region. At present, 38 nations and/or regions participate in APT [1]. In 1998, APT established the APT Standardization Program (ASTAP) as a standardization sector meeting. Since its inception, ASTAP has continued to be held once or twice a year. ASTAP's two main objectives are as follows [2]:

- to construct a harmonized discussion scheme in the Asia-Pacific region,
- to effectively propose the region's perspectives and policies to the international standards.

Table 1 shows the meeting structure of ASTAP, which comprises three Working Groups (WGs) and eleven Expert Groups (EGs) reporting to each WG.

1.1 WG Policy and Strategic Coordination

WG Policy and Strategic Coordination (PSC) investigates and shares member policies and strategies with respect to telecommunication technology. It comprises the following four EGs:

- EG ITU-T addresses topics related to the International Telecommunication Union - Telecommunication Standardization Sector (ITU-T),

- EG Bridging the Standardization Gap (BSG) supports developing countries by promoting telecommunication technologies,
- EG Policies, Regulatory, and Strategies (PRS) investigates policy and strategy issues,
- EG Green ICT and Electro-Magnetic Field Exposure (GICT&EMF) handles green of/by ICT and EMF exposure issues.

1.2 WG Network and System

WG Network and System (NS) comprises the following three EGs:

- EG Future Network and Next Generation Networks (FN&NGN) investigates next-generation networks,
- EG Disaster Risk Management and Relief System (DRMRS) considers disaster risk reductions,
- EG Seamless Access Communication Systems (SACS) investigates telecommunication technologies in access networks.

1.3 WG Service and Application

WG Service and Application (SA) comprises the following four EGs:

- EG Internet of Things Application/Services (IOT) handles Internet of Things (IoT) services,
- EG Information Security (IS) considers security

Table 1. Structure of ASTAP.

| Working Group (WG) | Expert Group (EG) |
|--|---|
| Policy and Strategic Coordination (WG PSC) Chair: Vietnam Vice-chair: Japan, China | ITU-T Issues (EG ITU-T) |
| | Bridging the Standardization Gap (EG BSG) |
| | Policies, Regulatory and Strategies (EG PRS) |
| | Green ICT and EMF Exposure (EG GICT&EMF) |
| Network and System (WG NS) Chair: South Korea Vice-chair: Japan | Future Network and Next Generation Networks (EG FN&NGN) |
| | Disaster Risk Management and Relief System (EG DRMRS) |
| | Seamless Access Communication Systems (EG SACS) |
| Service and Application (WG SA) Chair: Japan Vice-chair: South Korea | Internet of Things Application/Services (EG IOT) |
| | Information Security (EG IS) |
| | Multimedia Application (EG MA) |
| | Accessibility and Usability (EG AU) |

Table 2. Major outcomes of ASTAP-36.

| WG | EG | Type | Title |
|-----|----------|------------------------------|--|
| PSC | ITU-T | Liaison | Proposal for establishing of new SG13 regional group for Indian ocean rim countries |
| | BSG | Report (Revision) | Handbook to introduce ICT solutions for the community in rural areas |
| | GICT&EMF | Report (Revision) | Asia-Pacific regional activities on human exposure to EMF |
| | | Report (Amendment) | Standardization activities for e-waste and rare metals |
| | | Report (New) | Best practices and environment friendly policies for effective ICT deployment methods |
| NS | FN&NGN | Report (New) | Guidelines for 5G network sharing and co-construction |
| | | Questionnaire (Re-circulate) | Survey the problems and requirements to future network services in beyond 5G era |
| SA | IOT | Report (New) | Requirements and framework of IoT older person care solution |
| | IS | Guideline (Revision) | Guidelines for security use of IT devices and services |
| | MA | Questionnaire (Re-circulate) | Problems and requirements on CDN services in Asia-Pacific region in covid-19 |
| | | Questionnaire (Re-circulate) | Metaverse use cases in Asia-Pacific region |
| | | Liaison | ITU focus group on metaverse |
| | AU | Questionnaire (Re-circulate) | Status of the APT countries' mobile accessibility |
| | | Questionnaire (Re-circulate) | Current status of the APT countries' relay services for accessible emergency communication |

issues,

- EG Multimedia Application (MA) handles multimedia topics,
- EG Accessibility and Usability (AU) considers information accessibility and usability.

During an opening plenary session held on the first day of the 36th ASTAP Forum (ASTAP-36), all participants shared the program's overall direction, progress updates, and main objectives for each WG. Individual EG meetings were then held separately over the two days.

2. Major outcomes of ASTAP-36 and action plans for ASTAP-37

Table 2 summarizes the major outcomes of ASTAP-36. WG PSC issued a new APT Report titled "Best practices and environment friendly policies for effective ICT deployment methods," which highlights experiences on environmental protection using ICT technology. WG PSC also revised or amended three existing APT Reports: "Handbook to introduce ICT solutions for the community in rural areas,"

Table 3. Objectives for ASTAP-37.

| WG | EG | Type | Title |
|-----|----------|----------------------|---|
| PSC | ITU-T | Report (Continue) | Practical experience in combating counterfeit and stolen mobile device |
| | | Report (Continue) | Technical solutions for optical cable rural backhaul connectivity together with relevant ITU-T standards and its implementation |
| | BSG | Guideline (Continue) | Guideline on setting up national ICT standardization regime |
| | GICT&EMF | Report (Continue) | The status report of RF-EMF exposure assessment from mobile phone base stations in Asia Pacific region |
| NS | FN&NGN | Report (Continue) | Guidelines on application of ICT Trust index to APT members countries |
| | | Report (Continue) | Future network services in beyond 5G era |
| | | Report (New) | Low-altitude network and its key technologies |
| | DRMRS | Report (Continue) | Local-area resilient information sharing and communication systems |
| | SACS | Report (Continue) | Cascaded free space optical and millimeter-wave communication system for small-cell access networks |
| | | Report (Continue) | Seamless access systems for wideband THz services |
| | | Report (Continue) | Fiber-wireless bridge system for seamless access network in high-frequency band |
| SA | IOT | Report (Continue) | Guidance for emergency medical services in the digital age |
| | | Report (Continue) | IoT ecosystem development activities in APT member countries |
| | IS | Guideline (Continue) | Guidelines for IoT security (for manager) |
| | MA | Report (Continue) | Guideline of decentralized identity (DID) technology and its application |
| | | Report (Continue) | Problems and requirements on CDN services in COVID-19 in Asia-Pacific region |
| | | Report (Continue) | Metaverse use cases in Asia-Pacific region |
| | AU | Report (Continue) | Relay services for accessible emergency communication |
| | | Guideline (Continue) | Guide on developing accessible mobile application for the APT countries |
| | | Report (Continue) | Accessible IoT applications and smart city services in the AP region |
| | | Report (Continue) | Framework for evaluating usability of natural user interactions |

“Asia-Pacific regional activities on human exposure to EMF,” and “Standardization activities for e-waste and rare metals,” as scheduled.

WG NS issued one new APT Report titled “Guidelines for 5G network sharing and co-construction.” Chinese and South Korean experts provided extensive comments and proposals to this new report, implying their strong interest in sharing wireless infrastructures to facilitate effective construction and operation.

WG SA issued a new APT Report titled “Requirements and framework of IoT older person care solutions.” This WG also accomplished the revision of the existing APT Guideline “Guidelines for security use of IT devices and services.”

Table 3 summarizes the main objectives of each WG and EG toward ASTAP-37. Discussions will continue on 21 topics related to new or revised APT Reports/Guidelines. Among these 21 topics, 11 documents are planned to be approved and issued at ASTAP-37. During ASTAP-36, EG FN&NGN agreed to start discussions on a new APT Report titled

“Low-altitude network and its key technology” in accordance with the proposal from China and strong support from Vietnam. In this new work item, various applications of social infrastructure management using drones will be investigated, including related key technologies. This new APT Report is expected to be issued at ASTAP-39.

3. Industry workshop

ASTAP-36 included an industry workshop with its program outlined in **Table 4**. Three sessions were held consecutively. Session 1 focused on supply chain cybersecurity, showcasing seven experiences from Japan and China that highlighted harmonized activities among industries and governments as well as unique trials in each industry. Session 2 featured nine individual experiences on the effective use of ICT by small and medium enterprises in Japan, China, South Korea, and Malaysia. This session investigated three key aspects: sustainable development goals (SDGs), wireless infrastructure construction in

Table 4. Program for industry workshop.

| |
|---|
| Session 1: Supply Chain Cybersecurity 1.1 Industry-Government collaboration initiative <ul style="list-style-type: none"> Supply-chain security of auto industry in Japan (Japan) Introduction of Transportation ISAC (Information Sharing and Analysis Center) Japan (Japan) DNP's Supply Chain Security Initiatives and Issue Recognition (Japan) Securing the last chain (Last Mile): A customer-centric approach as a proactive security alerts across the supply chain (South Korea) 1.2 Industry-specific initiative <ul style="list-style-type: none"> Keidanren's approach to cybersecurity (Japan) Introduction of CRIC CSF (Cyber Risk Intelligence Center - Cross Sectors Forum) and Supply Chain (Japan) Supply Chain Cyber Security Consortium (SC3) activities (Japan) Introduction of standardization activity on supply chain security in South Korea (South Korea) |
| Session 2: Small Medium Enterprise 2.1 SDGs <ul style="list-style-type: none"> Measuring Air Pollutants using UAV (Japan) Accessibility in the Future Technologies for the Aging Society (Opportunities and Challenges in Asia) (South Korea) DNP's Supply Chain Security Initiatives and Issue Recognition (China) Securing the last chain (Last Mile): A customer-centric approach as a proactive security alerts across the supply chain (China) Brief introduction of Carbon data Reliable Circulation (China) How Digitalization Aids Mutual Trust and Cooperation in Small and Medium-sized Enterprises (China) 2.2 Rural communication <ul style="list-style-type: none"> Wireless Flexible mesh Network for Outdoor (Japan) 2.3 Emergence Technology <ul style="list-style-type: none"> Quantum Technology – The new Horizon (Malaysia) |
| Session 3: APT/ITU-T Workshop on Establishing National Standardization Secretariat (NSS) for BSG Capacity Building 3.1 Keynote speech: Mr. Seizo Onoe 3.2 NSS guideline: Mr. Akihiro Kato 3.3 Panel discussion |

rural areas, and quantum computing. Session 3 was designated as an APT/ITU workshop on establishing national standardization secretariats (NSSs) for BSG capacity building. In this session, Mr. Seizo Onoe, Director of ITU's Telecommunication Standardization Bureau (TSB), delivered the keynote speech and Mr. Akihiro Kato, Coordination Advisor, ITU TSB, explained the NSS guidelines. A panel discussion followed, enabling the sharing of various opinions and perspectives.

4. Future direction

ASTAP-37 will be held in 2025, with the exact date and venue yet to be determined. A vice-chair will plan an industry workshop as part of ASTAP-37.

References

- [1] APT, <https://www.apt.int/APT-Introduction>
- [2] ASTAP, <https://www.apt.int/APTASTAP>



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He received an M.S. and Ph.D. in electrical engineering from Nihon University, Chiba, in 1994 and 2005. In 1994, he joined NTT Access Network Service Systems Laboratories, where he has been engaged in research on optical-fiber design and related measurement techniques. He has been acting as a rapporteur of Question 5 of the ITU-T Study Group 15 since 2009. He is a member of the Institute of Electrical and Electronics Engineers (IEEE), Optica, the Institute of Electronics, Information and Communication Engineers (IEICE), and the Japan Society of Applied Physics (JSAP).