

## Activities of the APT Standardization Program (ASTAP)

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### Abstract

ASTAP was established by and within the Asia-Pacific Telecommunity (APT) in 1997 with the aim of conducting activities such as making joint proposals for standardization purposes in ITU (International Telecommunication Union), examining technical specifications to supplement global standards, and taking action to improve the technical knowledge about standards in this region. This article outlines the background of ASTAP and summarizes its activities as well as the activities of its FWA (fixed wireless access) Expert Group, for which the author acted as Rapporteur.

### 1. Establishment of ASTAP

At the APT (Asia-Pacific Telecommunity [1]) meeting on regional cooperation in standardization held in Tokyo in February 1997, a broad range of standardization topics was discussed. During this discussion, Japan proposed establishing a standardization organization, not only to contribute to global standardization activities but also to provide a venue within which its members could cooperate by sharing information about standardization, developing human resources, and examining technical specifications to supplement global standards. Since that meeting, the *ad-hoc* group worked towards this establishment. Based on the report issued by the *ad-hoc* group, the 21st session of the APT management committee held in Bangkok in November 1997 deliberated and then approved the establishment of ASTAP [2] within APT. The 1st ASTAP Forum was held in February 1998 in Bangkok. Various actions were taken: standardization themes were determined and Rapporteurs were nominated for Expert Groups. Thus, ASTAP was launched with a full range of activities as a standardization program in this region.

### 2. Structure of ASTAP

The structure of ASTAP as of the end of the 8th ASTAP Forum held in August 2004 is shown in **Fig. 1**. It consists of a Chairperson, two Vice-Chairpersons, Working Groups, Expert Groups, and an Advisory Board. Expert Groups are being established in various technical fields. Each operates according to work plans approved by the Forum. As of the 8th Forum, ASTAP had eight Expert Groups and Japan was Rapporteur or Co-Rapporteur in six of them. Expert Groups are classified by technical field into three Joint Expert Groups (JEGs) for Network, Wireless, and IT Application. Expert Group members come from APT members, associate members, and affiliate members, and they are all free to participate. E-mail is used for efficient communication as well as face-to-face meetings. The content of contributions to global standardization bodies (including ITU) is determined based on consensus achieved by an Expert Group and then submitted as an APT joint proposal. In addition to Expert Groups, there are Working Groups such as the ITU-T Issues Correspondence Group and the Regulatory Liaison Group.

The advisory board strategically prioritizes ASTAP action plans and advises ASTAP office-holders on the management of the ASTAP Forum. Its members include people from the Asia-Pacific region holding positions such as ITU SG chairpersons and vice-chairpersons.

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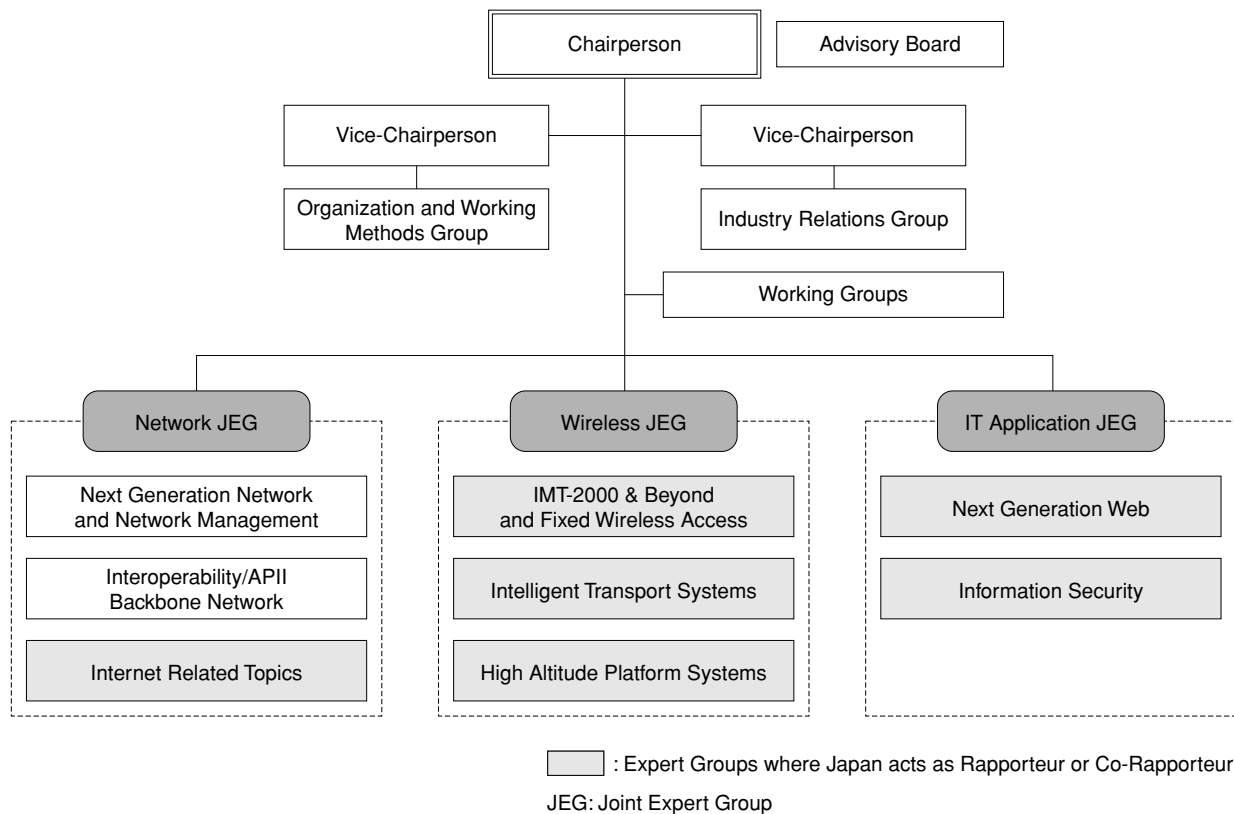


Fig. 1. Structure of ASTAP (as of the end of the 8th ASTAP Forum).

### 3. ASTAP Forum

ASTAP holds a meeting called a “Forum” at least once a year to make decisions on various activities. The first Forum was in February 1998 and the eighth in August 2004. APT members, associate members, and affiliate members can participate in the Forum. At the Forum, Expert and Working Groups report their activities and submit future work plans for debate and approval until the next Forum. In addition, the establishment and abolishment of Expert Groups should be approved at a Forum. Activities of standardization bodies of the participant countries are also introduced at the Forum.

The main topics at the 8th Forum, held in Hyderabad, India in August 2004, were as follows:

- Aiming at enhanced cooperation on standardization in the Asia-Pacific Region, it was decided that requests including a delegation of authority on documentation and some other matters should be sent to the APT Management Committee for considera-

tion.

- India proposed a pilot project on regional collaboration, and it was decided that some Expert Groups related to this matter should develop an input that should be proposed in ASTAP further discussions and which will be considered at the APT Management Committee.
- To reduce the number of parallel meetings and increase the number of participants in each Expert Group meeting, Japan proposed the establishment of Joint Expert Groups comprising related Expert Groups. This was approved. Accordingly, the Rules on Organizations and Working Methods for ASTAP were revised.
- The nine draft APT Common Proposals for the World Telecommunication Standardization Assembly (WTSA-04) were revised and approved.
- To avoid duplication of work areas and to make the activities of the Expert Groups more efficient, the Fixed Wireless Access (FWA) Expert Group and the IMT-2000 & Beyond Expert Group were com-

bined, the Metadata Expert Group was merged into the Next Generation Web Expert Group, and the Digital Multimedia Broadband Expert Group was abolished because it had achieved its initial goal.

#### 4. Activities of FWA Expert Group

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Fixed wireless access (FWA) systems connect stations and provide access lines economically and rapidly. To date, they have been used to connect different buildings of a company, take the place of run-down metal lines, and provide high-speed broadband IP services. For the eight Forums to date, the FWA Expert Group was active in the following areas:

- Mobile technology-based FWA systems were developed as tools for economically replacing run-down metallic cables and have been used widely in the Asia-Pacific region. The FWA Expert Group researched and studied technological characteristics of data communications using FWA systems based on PHS (personal handyphone system) technology. The results were summarized and submitted to ITU-R JRG8A-9B (Joint Rapporteur Group 8A-9B) in September 2000 as an APT joint proposal. This contributed to the revision of the existing recommendation.
- Along with the development of mobile technology-based FWA including PHS, coexistence with private wireless systems that use the same technology will become increasingly important. The FWA

Expert Group studied and summarized coexistence situations, coexistence-related regulations and recommendations, and other related materials in Asia-Pacific countries and disclosed it for FWA development in this area.

- IP-based broadband FWA standardization is under way to meet the demand for enhanced Internet access speeds. The FWA Expert Group studied QoS (quality of service) requirements issued by various standardization organizations including ITU-T, ITU-R, and IETF (ITU-T and ITU-R are the telecommunication standardization and radiocommunication sectors of ITU, respectively; IETF is the Internet Engineering Task Force). The Group also surveyed the standardization situations of broadband FWA systems by IEEE and ETSI (European Telecommunications Standards Institute). Those results helped to increase public awareness about standardization activities on broadband FWA systems in APT countries.

Today, the new group, the IMT-2000 & Beyond and FWA Expert Group, is planning to contribute to ITU-R on technical characteristics of broadband FWA systems conveying IP packets as an APT joint proposal.

#### References

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- [1] <http://www.aptsec.org/>
- [2] <http://www.aptsec.org/Program/ASTAP/pastap.html>



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He received the B.E. degree in electrical engineering from Niigata University, Niigata in 1985 and joined NTT the same year. He has mainly been engaged in link design of fixed microwave systems; research, service development, and commercial introduction of satellite communications systems; and development of portable wireless systems for digital video transmission. Currently, he is involved with a radio zone design system and operation support system for wireless IP access system (WIPAS). He acted as Rapporteur of the FWA Expert Group of ASTAP from April 2001 to August 2004. Now, he is acting as Co-Rapporteur of the IMT-2000 & Beyond and FWA Expert Group.

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