

# Newsletter ARIB SEASON



No.0035

## Topics

### The 4th APG-23 (APG23-4) meeting

APG-23 (Asia-Pacific Telecommunity Conference Preparatory Group for WRC-23) is responsible for developing APT Common Proposal for the World Radiocommunication Conference 2023 (WRC-23).

This is the fourth meeting of APG-23, which is scheduled to be held six times until the final meeting in around August 2023. The chairperson is Dr. Kyu-Jin Wee (Korea).

#### 1. Outline of the meeting

- Schedule: 15 - 20 August 2022
- Venue/Method: Bangkok, Thailand (Online participation available)
- Participants: 810 participants from 28 countries  
112 participants as the Japanese delegation headed by MIC, including 4 participants from ARIB.

#### 2. Formation of chairperson at APG23-4

Plenary Chair	Dr. Kyu-Jin Wee (Korea)
Plenary Vice Chair	Mr. Muneo Abe (Japan) Ms. Zhu Keer (China)
Editing Committee Chair	Mr. Christopher Hose (Australia)
WP1 (Fixed and Mobile Communications, Broadcasting)	Mr. Hiroyuki Atarashi (Japan) Dr. Jae Woo Lim (Korea)
WP2 (Aeronautical and Maritime Communications)	Mr. Bui Ha Long (Vietnam)
WP3 (Science)	Mr. Wahyudi Hasbi (Indonesia)
WP4 (Satellite)	Ms. Fenhong Cheng (China) Mr. Mrunmaya Pattanaik (India)
WP5 (General)	Dr. Taghi Shafiee (Iran)

### 3. Main results

At this meeting, APT Preliminary Views were prepared as the basis for developing of APT Common Proposals for each agenda item of WRC-23. The results of deliberations on the main agenda items related to IMT (AI 1.1, 1.2, 1.4 and 10) are shown below.

- (1) AI 1.1: Protection in the frequency band 4800-4990MHz of stations of the aeronautical and maritime mobile services and review of PFD (Power Flux Density) criteria

It was agreed that the APT Preliminary View is to support the on-going ITU-R studies relating Agenda Item 1.1, and this view was proposed by several APT Members including Japan through input contributions. On the other hand, regarding protection of stations of aeronautical and maritime mobile services located in international airspace and waters, APT members could not reach a consensus, therefore, discussions were decided to be continued.

- (2) AI 1.2: Identification of following frequency bands 3300-3400MHz, 3600-3800MHz, 6425-7025MHz, 7025-7125MHz and 10.0-10.5GHz for IMT

It was agreed that the APT Preliminary View is to support potential IMT identification in the frequency band 7025-7125 MHz, in line with Japan's proposal, however, it was decided that the identification of the frequency bands 3600-3800MHz and 6425-7025MHz for IMT will be discussed further and any possible IMT identification in the above-mentioned frequency bands in other Region shall protect existing primary services in Region 3.

- (3) AI 1.4: Use of HIBS (HAPS as IMT Base Stations) in the mobile service in certain frequency bands below 2.7GHz already identified for IMT

As a result of the discussion, considering the fact that the ITU-R studies related to this agenda item is still going on, it was decided that APT Preliminary View is to support the ongoing ITU-R studies for establishing a new globally or regionally harmonized regulatory framework for HIBS with a view to providing flexibility of spectrum usage for HIBS in certain frequency bands below 2.7 GHz already identified for IMT, while ensuring the protection of the existing services.

Proposals of Japan to support stipulating a provision in the Radio Regulations (RR) for HIBS operations at the altitude that could go down to 18 km, and to consider that the studies on HIBS UE should be treated as the outside the scope of this agenda item, were not agreed and were brought to future discussion.

- (4) AI 10 (related to the Agenda Items of WRC-27): Identification of additional frequency bands for IMT

Consideration of the identification of additional frequency bands for IMT was proposed as the Agenda Item of WRC-27 by Vietnam (specifically the frequency bands 7.125-24GHz and 92-300GHz) and Korea, which was supported by China.

However, countries which place importance on satellite communication expressed skeptical opinions regarding use cases and demand, therefore, this AI will be discussed at the next meeting.

#### 4. Future meeting schedule

The following schedule was announced.

- APG23-5 (Next): 20 - 25 February 2023 in Korea
- APG23-6 (Final): 14 - 19 August 2023 in Australia

### **CJK the 65th IMT Working Group Meeting**

CJK IMT Working Group Meeting is aiming to exchange information and views about the activities of international IMT standardizations in ITU-R, APT, 3GPP, and so on, among SDOs in China, Korea and Japan.

#### 1. Outline of the meeting

- Schedule: 26 and 29 August 2022
- Venue/Method: Online meeting
- Participants: CCSA: 49 people, TTA: 17 people, ARIB: 22 people

#### 2. Main results

- (1) The results of the 4th Meeting of the APT Conference Preparatory Group for WRC-23 (APG23-4), ITU-R SG5 the 41st WP5D meeting and the recent 3GPP meeting were shared, views were exchanged on the future issues to be studied.
- (2) For the 42nd WP5D meeting scheduled to be held from 10 October, progress of the preparation in each country was shared, joint contribution was discussed, and items for further study and work contents were identified.
- (3) Regarding the revision of ITU-R Recommendation on unwanted emission characteristics for IMT-Advanced, opinions of each country were exchanged, and it was decided that discussion including the possibility to develop joint contributions would be continued by email.
- (4) Status of studies and views of each country on the ITU-R Recommendation "IMT Vision for 2030 and beyond" which has been developed for Beyond 5G standardization was shared, and policies for scrutinizing the items that should be included in the recommendations and how to proceed with future studies were discussed. In addition, it was agreed that exchange of opinions by e-mail aiming for a joint contribution regarding the timeline described in the Vision Recommendation.
- (5) Opinions were exchanged on the identification of additional frequency bands for IMT which is being considered as a new agenda item for WRC-27. Discussion was decided to be continued for possibility of joint contribution describing the necessity of the identification of additional frequency bands for IMT toward the next APG23-5 meeting.

### 3. Next meeting schedule

The next CJK IMT Working Group Meeting would be scheduled for around January 2023.

## **The 30th Meeting of APT Wireless Group (AWG-30)**

The 30th Meeting of APT Wireless Group (AWG-30) was held in September.

### 1. About the APT Wireless Group (AWG)

APT (Asia-Pacific Telecommunity) Wireless Group, AWG, studies the harmonization of spectrum usage and standardization aiming at enhancement and dissemination of radiocommunication systems in the Asia-Pacific region. The meeting has been held usually about twice a year, and the experts of the wireless technologies of each country in this region join the meeting, where Mr. Le Van Tuan (Vietnam) works as a chairperson.

### 2. Outline of the Meeting

- Schedule: 5 - 9 September 2022
- Venue/Method: Bangkok, Thailand (Online participation available)
- Participants: 442 participants from administrations, private organizations and international organizations in the Asia-Pacific region, 77 participants as the Japanese delegation headed by MIC including 4 participants from ARIB

### 3. Main results

AWG has four working groups (WG on Harmonization, WG on IMT, WG on Terrestrial and WG on Space, Aeronautical and Maritime), in each of which sub working groups or task groups have been established for the issues significant for APT Members.

The main results of the meeting related to IMT and ITS are described below.

- (1) Revision of "APT report on frequency arrangements for IMT in the band 470-703 MHz" has been completed.
- (2) "APT report on frequency arrangements for terrestrial IMT in frequency bands 1920-2010 and 2110-2200 MHz" has been completed.
- (3) After scrutinizing the questionnaire regarding the new draft report on future frequency planning for IMT coverage and capacity improvement in 2025-2030, the questionnaire was approved.
- (4) Aggregation of responses to the survey on current usage and plans for 7.125-24 GHz and 92-300 GHz has been completed. Suggestions making the comparison between responses of each country easier were encouraged to be provided for the next meeting.

- (5) Working document towards new draft report on 5G deployments on frequencies above 24.25 GHz was updated and reviewed based on input contributions. It is to be completed after the remaining reviews are done at the next meeting.
- (6) With regard to the draft report on OTA (Over The Air) measurements, input contributions have been integrated into the working document and reviewed. Additional information such as case studies on measurement was requested, and the report will be completed at the next meeting.
- (7) As a new study item, a survey on self-testing and certification of mobile devices by mobile telecommunications carriers was proposed. Questions and working plan for the survey were brushed up and the start of work to conduct this survey was agreed. It is scheduled to be completed at the 33rd meeting.
- (8) In relation to two preliminary draft new reports under development, the one regarding cellular V2X and the other regarding millimeter-wave ITS, the contributions from Japan prepared by the ITS Info-communications Forum were reflected to these preliminary draft new reports, respectively. As a result, the draft on cellular V2X was completed and approved at the plenary as an APT report. The draft on millimeter-wave ITS was supplemented with demonstration results related to prediction of shadowing areas, and will be completed at the AWG meeting in 2024.

#### **4. Next meeting schedule**

The next AWG meeting will be held in Vietnam from 22 to 26 May 2023.

### **The 9th Global 5G Event in Tokyo**

The 9th Global 5G Event was held from 20 to 21 September at the Hotel New Otani in Tokyo (online participation available), co-hosted by MIC (Ministry of Internal Affairs and Communications) and 5GMF (The Fifth Generation Mobile Communications Promotion Forum).

The Global 5G Events have been held once a year based on a Multi-Lateral MoU signed by seven 5G promotion organizations around the world (the United States, Europe, China, South Korea, Brazil, India, and Japan) to collaborate on building consensus as well as smooth development and deployment of 5G. It was the second time to be held in Japan since the 3rd one in 2017.

The event featured lectures and panel discussions in six sessions attended by more than 600 participants (cumulative total of 1.5 days) both at the venue and online. Exhibitions in three booths were also arranged at the venue.



Group photo



Session

The program of the event was as follows.

Day1	Opening address	Prof. YOSHIDA Susumu Chairman of 5GMF (Professor Emeritus of Kyoto University)
	Welcome address	Ms. KUNIMITSU Ayano Parliamentary Vice-Minister for Internal Affairs and Communications
	Keynote Speech	Mr. NAKAMURA Yuji Director of Land Mobile Communications Division, MIC
	Opening Session	<b>Regulations and Policies for 5G</b> Mr. Chris PEARSON (Moderator / Speaker) President of 5G Americas Mr. NAKAMURA Yuji Telecommunications Bureau, MIC Mr. Peter STUCKMANN Deputy Director for Future Networks, DG CONNECT, European Commission Ms. Zhiqin WANG Chair of IMT-2020 (5G) Promotion Group Mr. Kyu-youl SHIM Director of Innovation Network Team, Ministry of Science and ICT Mr. Sunil Kumar Singhal DDG (AS), DoT (Department of Telecommunications), Government of India
Session1	<b>5G Business Trend on Commercialization</b> Dr. Kodo SHU (Moderator) Director of Wireless Standardization, Standards & Patents department, Huawei Technologies Japan Mr. TERABE Shigeo Deputy Chairman of Technical Committee, 5GMF (KDDI) Dr. Changsoon CHOI Vice President of Deutsche Telekom Mr. Manish TRIPATHI Vice President, Engineering, Qualcomm Mr. Jae Yeol KIM Research fellow at LG Uplus	

		<p>Mr. Satish Jamadagni Reliance Jio (Telecom Service Providers)</p> <p>Mr. Xinhui WANG Vice President, General Manager of Standardization and Industrial Relations, ZTE</p>
	Session 2	<p><b>5G Network Development and Installation for Advanced 5G</b></p> <p>Dr. Luciano LEONEL MENDES (Moderator) Professor, Inatel (National Institute of Telecommunications)</p> <p>Mr. NAKAMURA Takaharu Deputy Chairman of Technical Committee, 5GMF (Fujitsu)</p> <p>Dr. Ömer BULAKCI 6G Program Manager at Nokia</p> <p>Mr. Wei DENG Deputy Director of Department of Wireless &amp; Terminal Technology of China Mobile Research Institute</p> <p>Dr. Seong Kwan KIM Team Manager/Specialist at Infra R&amp;D Center, KT</p> <p>Mr. Balaji Rangaswamy CEO of Sooktha (Telecom Network Deployment Company)</p> <p>Dr. Flávio de OLIVEIRA SILVA Professor at Federal University of Uberlândia</p>
	Session 3	<p><b>Prospects from 5G to Beyond 5G</b></p> <p>Dr. Colin WILLCOCK (Moderator / Speaker) Chairman of 6G-IA</p> <p>Mr. NAKAMURA Takehiro Deputy Chairman of Strategy &amp; Planning Committee, 5GMF (NTT Docomo) (Leader of White Paper Subcommittee in Beyond 5G Promotion Consortium)</p> <p>Dr. Lola AWONIYI-OTERI Engineer, Principal/Manager, Qualcomm</p> <p>Dr. Wen Tong CTO, Wireless Network, Huawei Technologies</p> <p>Dr. Jun hwan LEE Principal Researcher, ETRI</p> <p>Dr. Luciano LEONEL MENDES Professor, Inatel (National Institute of Telecommunications)</p> <p>Ms. Shikha Srivastava C-DOT (Center for Development of Telematics)</p>
Day 2	Session 4	<p><b>Security and Trust for 5G Network and Application</b></p> <p>Mr. SN Rama Gopal (Moderator) DDG(NCCS), DoT (Department of Telecommunications), Government of India</p> <p>Dr. TEZUKA Satoru Chairman of Security Study Committee, 5GMF (Keio University)</p> <p>Mr. Emmanuel DOTARO Fellow, Head of ICT and Security labs at Thales</p> <p>Dr. Hui XU Senior engineer in CICT Mobile Communication Technology</p> <p>Mr. Dong myoung KIM Professional, Samsung Electronics</p>

		Mr. Sanjeev Dhallam Bharti Airtel (Telecom Service Provider)
Special Session		<b>Japan's initiatives for Advanced Service Application of 5G</b> Mr. IWANAMI Gota (Moderator) Chairman of Service & Application Committee, 5GMF (INFOCITY) Dr. NAKAO Akihiro Chairman of Network Architecture Committee, 5GMF (The University of Tokyo ) Mr. TAKANO Masaharu Chief examiner of Use Scene Working Group, Service & Application Committee, 5GMF (bitmedia) Mr. HIRANO Tomoyasu CEO, Teleport, Inc. Dr. NOMOTO Kazumasa Technology Fellow, R&D Center, Sony Group Corporation
Wrap up panel, Closing address		Mr. OHMURA Yoshinori Secretary General, 5GMF

**Mr. ONOE elected as the next Director of the  
Telecommunication Standardization Bureau at ITU**

During the ITU Plenipotentiary Conference 2022 (PP-22) held in Bucharest, Romania, from 26 September until 14 October, the Japanese candidate, Mr. ONOE Seizo was elected as the next Director of the Telecommunication Standardization Bureau. He has contributed as the chairman of the Standard Assembly of ARIB since 2011.



Mr. Onoe at the Standard Assembly of ARIB



**Association of Radio Industries and Businesses**

ARIB SEASON  
Publishing

1-4-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-0013 JAPAN  
<https://www.arib.or.jp/english/>