

Newsletter ARIB SEASON



Event

2016 Annual General Meeting of 5GMF

On 5 July 2016, 2016 fiscal year's Annual General Meeting of the Fifth Generation Mobile Communications Promotion Forum (5GMF) was held in Tokyo.

In the Meeting, 220 people from 77 companies (such as telecommunications operators and communications equipment manufacturers), universities, research institutes and the Ministry of Internal Affairs and Communications (MIC) had participated. At the beginning, there was a greeting speech as a guest from Mr. Katsuya Watanabe, Director-General of the Radio Department of MIC.

After a greeting speech from Dr. Susumu Yoshida, chairman of 5GMF (Professor Emeritus of Kyoto University), "business report and the settlement of accounts of 2015 fiscal year", "business plan and the budget statements of the 2016 fiscal year", revision of regulations and election of officers were deliberated and all approved as proposed.

In addition, the social gathering was held after the General Meeting, and there was a greeting speech as a guest from Mr. Keiichi Koshimizu (Parliamentary Secretary for Internal Affairs and Communications).



2016 Annual General Meeting of 5GMF



Dr. Susumu Yoshida

**Chairman of 5GMF
(Kyoto University)**



Mr. Keiichi Koshimizu

**Parliamentary Secretary
for Internal Affairs and
Communications**



Mr. Katsuya Watanabe

**Director-General of the
Radio Department of MIC**

The 4th Japan-Botswana JWG Meeting Held in Tokyo

The 4th Japan-Botswana Joint Working Group Meeting was held at the headquarters of Ministry of Internal Affairs and Communications (MIC) in Tokyo on 8 July 2016. Botswana decided to adopt ISDB-T in 2014, being the 1st ISDB-T adopting country in the African continent; and since then has had a bilateral meeting with Japan every year for the support and cooperation in the ISDB-T implementation. The meeting this time was attended by the representatives of Botswana's Department of Broadcasting Services (DBS) of the Office of Presidency and of the Embassy of Botswana in Japan; while the Japanese side was represented by MIC, Japan International Cooperation Agency (JICA), Association for Promotion of Advanced Broadcasting Services (A-PAB), ARIB/DiBEG, etc., and they exchanged views and opinions on digital TV of both countries and discussed mutual collaborative works in digital broadcasting from now onward.

Botswana explained that they started nationwide digital terrestrial TV broadcasting as of December, 2015; would materialize analog switch-off (ASO) in December this year; while the sales pace of digital TV receivers, frequency arrangement with neighboring countries, etc. are the challenges they now face.



The 4th Japan-Botswana JWG Meeting

On the other hand Japan explained its experiences in the marketing promotion of digital TV receivers, ASO, etc., and expressed their willingness to continue its support for the smooth completion of ASO, frequency planning, etc. Also regarding the points of interests of Botswana, Japan explained in details of the technologies of EWBS and the current status of studies of the Technical Harmonization Documents in the ISDB-T International Forum.

Taking the opportunity that Botswana is scheduled to host the World Telecommunication/ICT Indicators Symposium (WTIS) in November this year, both parties agreed to prepare for the next Joint Working Group Meeting to be held at that occasion.

ARIB and TAICS signed MoU for future cooperation

On 12 July 2016, ARIB and Taiwan Association of Information and Communication Standards (TAICS) signed a Memorandum of Understanding (MoU) for future cooperation.

TAICS is an industry organization founded in June 2015 with the members from industry, research and academia organizations in Taiwan. The objective of TAICS is to bridge the local industry with global standard initiatives/organizations by contributing the study results or consolidated consensus, it may also develop the local standard or study report per request.

Both organizations will promote the cooperation, such as information exchange towards the standardization work, participation in the meetings and events of each other, cooperation towards contribution document issuance, etc. in the field of communication, broadcasting and ITS.

In the signing ceremony, Mr. Jonathan Tsang (Chairman of TAICS) and 15 people from TAICS and Mr. Fusaki Matsui (Senior Managing Director of ARIB) and 10 people from ARIB were participated. After the ceremony, outline and activity of each organization was introduced, and exchange of views was carried out.



**MoU signed by
Mr. Jonathan Tsang**
(Chairman of TAICS)
and

Mr. Fusaki Matsui
(Senior Managing Director of ARIB)



Meeting after the ceremony

Frequency Resources Development Symposium 2016

The Frequency Resources Development Symposium 2016 —the theme of which was new wireless systems towards 2020— was held in Tokyo on 15 July 2016. The event was co-organized by the Association of Radio Industries and Businesses (ARIB) and the National Institute of Information and Communications Technology (NICT). Additional support was provided by the Ministry of Internal Affairs and Communications (MIC).



Frequency Resources Development Symposium 2016

Towards 2020, "creation of new value-added industry" is set up as the essential target in the ICT growth strategy, and creation of new service and business by the fifth-generation mobile communication system (5G), connection of wide variety equipment for realization of IoT, development and utilization of untapped frequency band such as millimeter wave and terahertz wave and the development of new wireless systems, such as the next Engineering test satellite (ETS-IX) are being promoted.

Towards the introduction of these new wireless systems, industry, academia and government are cooperating with each other in Japan in order to foster a safe and secure wireless systems as a future key industry with international competitiveness.

In this symposium, lectures about new wireless systems towards 2020 were carried out by experts in industry, academia and government.

The program was as follows.

1. Trend in recent radio policy

Mr. Yasuo Tawara, Director of Radio Policy Division, Telecommunications Bureau, MIC

2. Outlook of the service and wireless communication technology in 5G era
Prof. Seiichi Sampei, Osaka University (Chairman of the Technical Committee, 5GMF)
3. Wireless communication technology necessary for the future IoT
Associate Prof. Shunsuke Saruwatari, Osaka University
4. Future and trends of the wireless systems of millimeter-wave band and terahertz wave band
Dr. Kazuaki Takahashi, Panasonic
5. Satellite communications technology of IoT / 5G era
Dr. Naoto Kadowaki, National Institute of Information and Communication Technology (NICT)



Mr. Yasuo Tawara
Director of Radio Policy Division, MIC



Prof. Seiichi Sampei
Osaka University



Associate Prof. Shunsuke Saruwatari
Osaka University



Dr. Kazuaki Takahashi
Panasonic



Dr. Naoto Kadowaki
NICT

Overview of the first APG-19 meeting

APG-19 (Asia-Pacific Telecommunity Conference Preparatory Group for WRC-19) has responsibility to create the APT Common Proposal towards the World Radiocommunication Conference to be held in 2019 (WRC-19).

The first meeting of APG-19 was held on July 2016. Overview and Major results of the meeting are as follows.

1. Overview of the meeting

Schedule	From 26 to 28, July 2016
Venue	Chengdu, China
Participants	About 270 people from 24 countries
Participants from Japan	35 people (including 3 people from ARIB) headed by Mr. Sugata (Director of International Frequency Policy Office, MIC)

2. Major results

Regarding the new chairman / vice-chairman and organization of working parties, discussion and adjustment had been made based on the each country's proposal. As a result, these subjects were decided as following table. Mr. Muneo Abe (Mitsubishi Electric) was elected as the chairman of the working party 3 (WP3) in which the agenda of the satellite service will be handled.

Examination system of APG-19

Chairman	Dr. Kyu-Jin Wee	(South Korea)
Vice-chairman	Mr. Xiaoyang Gao Mr. Neil Meaney	(China) (Australia)
Chairman of editorial committee	Dr. Tommy Chee	(New Zealand)
WP1: Land mobile and fixed services	Ms. Zhu Keer	(China)
WP2: Broadband applications in the mobile service	Dr. Kyung-mee Kim	(South Korea)
WP3: Satellite services	Mr. Muneo Abe	(Japan)
WP4: Science services	Dr. Atmadji Wiseso Soewito	(Indonesia)
WP5: Maritime, aeronautical and amateur services	Mr. Bui Ha Long	(Vietnam)
WP6: General issues	Mr. Taghi Shafee	(Iran)

- After the establishment of WPs, the first meeting of each WP was held. Discussion about the configuration of the drafting groups (DG) under each WP, chairman of each DG and the future work plan was carried out in each WP.
- With respect to liaison documents from AWG (APT Wireless Group) which performs a study on radio in APT, answer document to request the implementation of the investigation and the provision of timely investigation results necessary for discussions in APG, was created.

- Future meeting plan was decided as follows.

2nd meeting	mid-July 2017 (4-5 days)	Start the creation of APT provisional views
3rd meeting	July or August 2018 (5 days)	Update the APT provisional view
4th meeting	December 2018 or January 2019 (6 days)	Complete the CPM19-2 proposal Update the APT provisional view
5th meeting	July or August 2019 (6-7 days)	Complete the APT joint proposal

3. The next meeting schedule

The 2nd meeting of APG-19 is scheduled to be held in Indonesia in mid-July 2017.

The 15th CJK IT Standards Meeting

CJK Meeting on Information and Telecommunication Standards started on June 2002 with an initiative of ARIB of Japan, CCSA* of China, TTA* of South Korea, and the TTC* of Japan to promote mutual cooperation among the standards development organization of Japan, China and South Korea more actively.

The 15th CJK IT Standards Meeting was held from 2 to 4 August 2016, hosted by CCSA at China Xining (Qinghai Province). A total of about 80 people (13 people from ARIB led by Dr. Kohei Satoh, Executive Manager on Standardization) participated in the meeting.

In this time, in addition to the 15th plenary meeting, the 46th IMT (International Mobile Telecommunication) WG, the 12th WPT (Wireless Power Transmission/Transfer) WG and so on were held in parallel.

In the Plenary meeting, the report of each WG was carried out. After the proposal and discussion of the way to manage the meeting in smaller scale and more efficiently, the procedure of the joint proposal was agreed.

In the IMT WG, after the sharing of information about the results of the recent ITU-R SG5 WP5D 24th meeting and APG19*-1 meeting, exchange of views toward WP5D 25th meeting (5 to 13 October 2016) was carried out, and the policy for study on frequency distribution, IMT modeling for frequency sharing study, performance evaluation criteria, the technical requirements, etc. were agreed.

In the WPT WG, along with the sharing of information about the results of ITU-R SG1 and activities of each SDO, policy of joint proposal towards the AWG*-20 (from 6 to 9 September 2016) and future agenda items were discussed. About the chairman of the WPT WG, takeover from Mr. Wang of CCSA to Dr. Hiroki Shoki of ARIB (Toshiba) was determined. Dr. Shoki will serve as the chairman in next one year.

Next 16th CJK IT Standards Meeting will be held in August 2017 in Jeju Island, South Korea, hosted by TTA.

- *CCSA: China Communications Standards Association
- *TTA: Telecommunications Technology Association
- *TTC: The Telecommunications Technology Committee
- *APG19: APT Conference Preparatory Group for WRC-19
- *AWG: APT Wireless Group



The Plenary meeting of the 15th CJK IT Standards Meeting



Participants of the 15th CJK IT Standards Meeting



The IMT WG

Liaison meeting on collaboration and cooperation between NICT and ARIB

Based on the agreement of the promotion of collaboration and cooperation signed between the National Institute of Information and Communications Technology (NICT) and ARIB, the 4th liaison meeting was held on 26 August 2016.

This agreement was signed on 12 March, 2013 to strengthen the collaboration and cooperation of the two institutions on research, development and standardization. In the liaison meeting, the activities of both institutions were introduced, followed by a lively exchange of views on further promotion of collaboration and cooperation.



The 4th liaison meeting of NICT and ARIB

* Lower left is Mr. Fusaki Matsui (Senior Managing Director of ARIB)

*Lower right is Dr. Fumihiko Tomita (Vice President of NICT)

The 47th CJK 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, 3GPPs, and so on, among members of SDOs in China, Japan and South Korea.

On 26 August 2016, the 47th CJK IMT Working Group Meeting was held in Shanghai, China. 6 people from ARIB, 9 people from CCSA (China) and 6 people from TTA (South Korea) had participated in the Meeting.

This time, the agenda of the meeting was specialized in preparation for the 25th ITU-R SG5 Working Party 5D (WP 5D) meeting to be held in October 2016.

In the Meeting, following actions were carried out.

- (1) Shared the information about the status of preparation towards the 25th WP5D meeting
- (2) Confirmed the status of activities of three Special Interest Group (SIG-Spectrum, SIG-Requirements and SIG-Evaluation)
- (3) Examined the joint contribution documents on the basis of the common part of the proposed contents of each SDO, and determined to promote the adjustment of 6 contribution documents toward the joint Contribution
- (4) Determined to carry out the rotation of the host SDO of the meeting (which will be held three times a year)
- (5) Reviewed the agenda of the meeting in future so that the discussion toward WP5D meeting could be carried out fully and effectively

The next CJK IMT Working Group Meeting was scheduled on 17 and 18 January 2017 in South Korea.

ARIB/DiBEG got Two Awards at the SET EXPO 2016

The SET EXPO 2016, comprising the exhibition of TV technology-related equipment and solutions as well as symposiums and conferences, was held in Sao Paulo, Brazil from 29 August through 1 September 2016. The SET EXPO is an annual event organized by the SET (Sociedade Brasileira de Engenharia de Televisao), and is one of the largest events of broadcasting technology in the Latin American areas.

This year, being the 10th year since Brazil adopted the ISDB-T (Japanese broadcasting standard for digital television) in 2006, there was a 10-year ceremony of collaboration in digital television also held at this occasion by inviting ministerial representatives from the ISDB-T adopting countries in Latin America.



Opening Ceremony

Representing Japan, Mr. Jiro Akama, State Minister for Internal Affairs and Communications, attended the Opening Ceremony of the SET EXPO 2016 and the 10-year ceremony of collaboration in digital television and made speeches. He also agreed with the representatives of the ISDB-T adopting countries in Latin America that the mutual collaboration in the broadcasting area should be expanded to the entire areas of ICT.



State Minister Jiro Akama at the 10-year Ceremony of Digital TV Collaboration

At the Opening Ceremony of the SET EXPO 2016, the DiBEG (the Digital Broadcasting Experts Group of ARIB) got a SET Award and another Award by the SBTVD Forum, which is a standardization body on Brazilian terrestrial digital TV, for its contribution to the international promotional activities of ISDB-T.



SET AWARD handed to ARIB/DiBEG



SBTVD Forum AWARD handed to ARIB/DiBEG

Also at the exposition, the Japan Pavilion was set up by the Ministry of Internal Affairs and Communications where Japanese ICT-related companies and institutions participated in the exhibition, in which ARIB/DiBEG also made display of panels showing its international activities of ISDB-T promotion as well as a demonstration of EWBS (Emergency Warning Broadcast System) as one of the key features of ISDB-T.





Japan Pavilion



Demonstration of EWBS



SBTVD Forum Booth



English



Spanish



**"Kagami-Biraki" ceremony
in the pavilion**

Technical Harmonization Meeting of ISDB-T International Forum Held in Sao Paulo

Taking the opportunity of the SET EXPO 2016 in Sao Paulo, on 29 August the Technical Harmonization Meeting of the ISDB-T International Forum was held, where the ISDB-T adopting countries exchanged technical views and opinions. Representatives from 10 countries, namely Japan (from the Ministry of Internal Affairs and Communications, ARIB/DiBEG and a JICA Expert in Peru), Brazil, Costa Rica, Honduras, Ecuador, Chile, Bolivia, Paraguay, Guatemala and Venezuela, attended the meeting.

At the meeting they exchanged the current progress in ISDB-T implementation at each of the countries and their current challenges toward the analog switch-off (ASO); while Japan presented their experiences in the ASO such as various promotional tools and campaigns for the pre-announcements, as well as its roadmaps toward the 4K/8K broadcasting.

Also at the Technical Harmonization Meeting, where technical documents have been compiled and revised in 3 areas (Hardware, Middleware and EWBS) by incorporating the differences in the standards of each of the member countries, ARIB/DiBEG made a presentation about the history and the points of discussions on EWBS, and presented some ideas of solutions to the challenges to the mass permeation of ISDB-T receiver products in the market.

A new subject of discussion was raised in the meeting that there are differences in the type approval procedures on the receiver products among the member countries. To tackle this subject it was agreed that an e-mail-based virtual team should be established to share and exchange information among the member countries.



Technical Harmonization Meeting of ISDB-T International Forum



**Presentation by Mr. Y. Sakaguchi,
DiBEG Expert**



**Presentation by Mr. N. Okabe,
JICA Expert**

The 2nd Regular ARIB/DiBEG – SBTVD Forum Meeting Held

ARIB/DiBEG and SBTVD Forum have been collaborating in the promotion of ISDB-T in Latin America. Starting this past April, to further enhance the collaborative activities the two entities decided to have regular meeting sessions roughly every 6 months, and at the SET EXPO 2016 opportunity the 2nd regular meeting was held on September 1 in Sao Paulo. At this occasion, as the very 1st trial, the ARIB/DiBEG representatives were present at the session in a different manner; while 3 people including Mr. Y. Homma, Vice Director General of R&D Headquarters of ARIB, were present at the conference room in the Expo Center, face to face with the SBTVD people, 3 other people such as Dr. M. Sugawara, Chairman of DiBEG, participated in the meeting from Japan via a web conference system.



The 2nd Regular ARIB/DiBEG – SBTVD Forum Meeting

Both parties started the meeting with the exchange of the latest status of each country. Japan explained the trial 4K/8K broadcasting launched as of 1 August 2016 and also about ARIB's preparatory status toward the standardization of the commercial operation of such services.

The Brazilian side proposed closer exchange of information between the two parties in respect to the next generation of broadcasting services, due to the urgency to make policy decision-making within a few years; and the Japanese side accepted it. Both parties will each nominate a contact person and will continue exchange of information.

Besides, as to the subject pending since the last meeting on the renewal of the joint documents compiling the differences between the ARIB and the Brazilian ISDB-T standards, both parties agreed on the concrete steps to take together.

There was also exchange of views and opinions regarding the diffusion of EWBS receivers in the Latin American market. Japan proposed to carry out a survey toward Japanese and Brazilian manufacturers about the challenges to the mass marketing of EWBS receivers, to which Brazilian side responded that they would cast inquiries to those

suppliers upon receiving detailed questionnaire from Japan.

The next regular meeting was agreed to be set at the opportunity of the NAB Show in Las Vegas, Nevada, USA in April next year.

The 20th Meeting of APT Wireless Group (AWG-20)

The 20th Meeting of APT Wireless Group (AWG-20) was held as follows.

1. About the APT Wireless Group

APT (Asia-Pacific Telecommunity) Wireless Group is a meeting to study the harmonization and standardization of the frequency and technical matters of wireless communication systems in the Asia-Pacific region for the purpose of advancement, dissemination and promotion of wireless communication systems. It has been held usually about twice a year, and the experts of the wireless technology of each country in this region have joined the meeting. Now, Dr. Kohei Satoh, Executive Manager on Standardization of ARIB has served as the chairman.

2. Outline of the Meeting

Schedule	From 6 to 9 September 2016
Venue	Centara Grand at Central World (Bangkok, Thailand)
Participants	More than 200 people from administrations, private organizations and international organizations in the Asia-Pacific region had taken part in the meeting. As the Japanese delegation, 39 people headed by Ms. Amino, Deputy Director of the international frequency Policy Office of MIC had participated. From ARIB, Dr. Kohei Satoh and two other members had participated.

3. Main results

In the APT Wireless Group, 3 working groups (WG) (frequency, technology and service / application) had been set. In each WG, sub working group or task group had been established for each issue, and consideration and deliberation was carried out.

The main results of the meeting were as follows.

(1) IMT (The fifth generation mobile communication systems, etc.)

Creation of the working document about the usage survey of 24.25-86 GHz band in each country which is the agenda of WRC-19, had been carried out. This working document is planned to be completed as APT report in the next meeting. In addition, frequency arrangements, study of shared use and the creation of working document related to the

bands that had been specified to the IMT in 6GHz or less at WRC-15 had been carried out. This time, it has agreed to start the study of frequency arrangement of the 1427-1518 MHz band by proposal of Japan and the like.

(2) Intelligent transport systems

Draft of the revised APT report about the usage situation of ITS in each country was created on the basis of proposals from Japan and the like. In addition, postscript about the standardization progress on LTE V2X was carried out in the draft based on the input from 3GPP.

(3) Railway radio system

In relation to the WRC-19 agenda, creation of the working document related to the communication between a train and line-side equipment was begun on the basis of proposals from Japan and the like. This working document is planned to be completed as APT report at the 22nd meeting.

(4) Wireless power transmission system (WPT)

With respect to consideration of the frequency of Non-BEAM WPT for the power transmission of electric vehicles, creation of the working document was begun on the basis of proposals from Japan and the like. This working document is planned to be completed as APT report at the 22nd meeting.

In addition, due to expiration of the term of office of present chairman (Dr. Kohei Satoh), deliberation of the election of next chairman was carried out, and Dr. Satoh had been re-elected as the second term. Similarly, vice-chairman (Ms. Zhu Keer (China) and Mr. Le Van Tuan (Vietnam)) had also been re-elected. Discussion of the management methods of the AWG was also carried out, and taking into account the activity cycle of ITU-R, it was agreed that extension of the term of office from two years to three years should be proposed in the upper meeting of APT.

4. The next meeting schedule

The next AWG-21 meeting will be held in late March or early April 2017.



**Dr. Kohei Satoh as the chairman
(Center of the photo)**



The 20th Meeting of APT Wireless Group

The 2nd International Forum on Digital Terrestrial TV Held in Honduras

The 2nd International Forum on Digital Terrestrial Television was held in Tegucigalpa, Honduras on 8 and 9 September 2016.

As many as 250 people, from the Honduran government, telecom operators and broadcasters, etc., participated in the Forum. The Japanese delegation was headed by Mr. T. Shibata, Deputy Director, Broadcasting Technology Division of MIC (Ministry of Internal Affairs and Communications), together with Mr. N. Okabe, Expert of JICA (Japan International



Cooperation Agency) in Peru, and one each engineer from NEC, NHK ITEC and Hitachi Kokusai. (*NEC and NHK ITEC people participated as DiBEG experts.)

Honduras decided to adopt ISDB-T in September, 2013, and started ISDB-T broadcasting as of March, 2014. This time, this International Forum on Digital Terrestrial Television was organized by CONATEL (Comision Nacional de Telecomunicaciones) in its capital city Tegucigalpa for the purpose of providing the latest information on the products and technologies of digital terrestrial TV, in the form of seminar and exhibition, to promote the digital terrestrial TV in Honduras. And ARIB/DiBEG dispatched 2 experts out of its member companies to help and support the ISDB-T implementation.

On the 1st day of the Forum, representatives from MIC, JICA, ARIB/DiBEG, etc. introduced and presented the ISDB-T technologies and operation, outline of EWBS (Emergency Warning Broadcast System) and experiences in Japan of ASO (analog switch-off), together with the demonstration of EWBS reception.

On the 2nd day, representatives from Japan and other countries presented each of their own products and systems for program production, storage, playout, distribution, etc.

At the exhibition area, 16 companies and institutions including Toshiba made their display of products, equipment and systems.

ARIB/DiBEG representatives reported that the Forum was a big success, being highly appreciated by the participants; with many requests for the presentation materials upon completing the program.



**Mr. T. Shibata,
MIC**



**Mr. N. Okabe,
JICA Expert**



**Mr. O. Hashimoto,
DiBEG Expert**



**Mr. Y. Sakaguchi,
DiBEG Expert**

oneM2M seminar co-sponsored by ARIB and TTC

The ARIB · TTC co-sponsored seminar on the Release 2 specification of oneM2M was held at the ARIB conference room on 9 September 2016.

1. Outline of the seminar

Title	The ARIB · TTC co-sponsored seminar “Standardization trend of IoT - Whole picture of release 2 of oneM2M technical specification –“
Sponsor	ARIB and TTC (The Telecommunication Technology Committee)
Schedule	9 September 2016, from 13:30 to 17:30
Venue	ARIB conference room
Participants	About 190 people

2. Purpose of the seminar

“oneM2M” is a global standard specification that provides a common service platform to support variety of services / applications of IoT / M2M, and makes it easy to collect information from variety of devices and to control these devices. It is expected that new M2M service will be able to achieve in a short time and low cost by oneM2M.

Already, release 1 of oneM2M (set of basic functional specification) had been issued, and on this August, release 2 which is the complete specification set covering the necessary functions of the platform had been issued formally. So, the ARIB · TTC co-sponsored seminar was held to introduce the full picture of the release 2 specification widely and fastest in the world.

Public interest for this theme was very high, and more than 190 people had participated in the seminar.

After the lectures, many question-and-answer sessions were carried out.

At the seminar, total of 12 lectures including “the history of development for oneM2M Release 2 specification,” "explanation of major technology theme in the specification", "Future Development" and so on, were carried out. Strong interest and expectation of participants to the latest oneM2M information was felt.



oneM2M seminar

ARIB - DVB Regular Meeting Held

The annual meeting between DVB (Digital Video Broadcasting), the standardization organization for digital television in Europe, and ARIB was held at the opportunity of the IBC (International Broadcasting Convention), the largest exhibition of broadcasting equipment in Europe (8 - 13 September).

1. Outline of the meeting

Schedule	10 September 2016
Venue	RAI Exhibition Center (Amsterdam, Netherlands)
Participants	<p>(DVB)</p> <p>Mr. Peter MacAvock (Chairman, DVB Project; EBU)</p> <p>Mr. Graham Mills (CM Chairman, DVB Project; Vodafone)</p> <p>Mr. Peter Siebert (Executive Director, DVB Project)</p> <p>(ARIB)</p> <p>Mr. Masayuki Sugawara (Chairman DiBEG)</p> <p>Mr. Tomohiro Saitou (NHK), Mr. Masakazu Iwaki (NHK/ABU),</p> <p>Mr. Kenichi Murayama (NHK), Mr. Hiroshi Nakano (Broadcast Group, ARIB)</p>

2. History and the purpose of the meeting

The meeting has been held annually, based on the agreement of exchanging information at “the regular meeting between Japan and EC” in 1994. The information about activities and liaison has been shared, and views on the hot topics have been exchanged at the meetings.



DVB exhibition area

3. Main results

(1) Report of the latest activities

ARIB gave an overview of the V-Low multimedia broadcasting service, 4K/8K test broadcasting, and progress of the related ARIB standardization. DVB asked questions about coding method and the parameters of audio system for 4K/8K.

DVB explained status of study on UHDTV phase2 which is next generation broadcasting system in Europe, stressing that the problem is how to make standardization proceed, taking the operation of broadcasting organizations into account, because there are several candidate for the audio system. DVB said that the interference between the next generation broadcasting and Wi-Fi, mobile telecommunication services was also a challenge.

And furthermore, DVB showed strong interest in status of study on the next generation broadcasting system in Japan, and expressed will to proceed in exchanging information based on the agreement.

As a demonstration at the DVB exhibition area, terrestrial/satellite broadcasting was projected on the sub-screen through IP transmission on Wi-Fi from the main TV which was used for a server. Both DVB and ARIB shared the recognition that problem to be solved exists on the copyrights of the content, as a result of discussing about the exhibition.

(2) Liaison

ARIB and DVB reviewed and renewed the contact person.

(3) International promotion

ARIB and DVB exchanged views of the promotion of each digital broadcasting system to the country or area where the system is not adopted, understood that both were doing almost the same activities, and exchanged the latest information about the country and area where the digital TV is adopted.

<p align="center">Monthly seminars on radio wave use</p>

No.142	29 July 2016
Title	Latest trends in radio utilization system for robots and drones
Speaker	<p>Mr. Hidetomo Ito Deputy Director of the Land Mobile Communications Division Radio Dept., Telecommunications Bureau, MIC</p> <p>Dr. Kenzo Nonami Chairman of Mini-Surveyor Consortium (Special professor of Chiba University)</p> <p>Mr. Akira Aneha Futaba Corporation</p> <p>Mr. Osamu Akimoto Council on Competitiveness-Nippon Sub leader of disaster response robot promotion coordinating committee (Hitachi, Ltd).</p>
Summary	The seminar covered the activities of MIC on improvement of radio utilization system for robots and latest trends in radio utilization system for robots and drones.
No.143	25 August 2016
Title	Guidance for the safe and secure radio wave use in medical institutions
Speaker	<p>Prof. Takashi Kano Chairman of the Telecommunications Promotion Committee in medical institutions, EMCC (Saitama Medical University)</p>
Summary	<p>The seminar covered the detailed explanation of “Guidance for the safe and secure radio wave use in medical institutions” which was published by the Telecommunications Promotion Committee in medical institutions, EMCC on 4 April 2016.</p> <p align="center">EMCC : Electromagnetic Compatibility Conference Japan</p>

1. Newly established Standards at Standard Assembly on 29 September 2016

**LOW POWER DATA COMMUNICATION SYSTEM/
60 GHz-BAND WIRELESS LAN FOR VERY HIGH
THROUGHPUT DATA COMMUNICATIONS
(STD-T117 Ver.1.0)**

This standard specifies the "60 GHz band ultra-high-speed throughput wireless LAN system" which is based on the IEEE802.11ad standard as a multiple access scheme and mainly performs wireless communication for data transmission among the radio stations of low-power data communication system.

2. Revised or abolished Standards at Standard Assembly on 29 September 2016

(1) Telecommunications field

STD Number	Standard Name	Version
STD-T63	IMT-2000 DS-CDMA and TDD-CDMA System	Ver.12.10
STD-T69	MILLIMETER-WAVE VIDEO TRANSMISSION EQUIPMENT FOR SPECIFIED LOW POWER RADIO STATION	Ver.4.0
STD-T74	MILLIMETER-WAVE DATA TRANSMISSION EQUIPMENT FOR SPECIFIED LOW POWER RADIO STATION (ULTRA HIGH SPEED WIRELESS LAN SYSTEM)	<u>abolished</u>
STD-T95	OFDMA/TDMA TDD Broadband Wireless Access System (XGP)	Ver.3.5
STD-T104	LTE-Advanced System	Ver.4.10
STD-T110	DEDICATED SHORT-RANGE COMMUNICATION (DSRC) BASIC APPLICATION INTERFACE	Ver.1.1

(2) Broadcasting field

STD Number	Standard Name	Version
STD-B10	SERVICE INFORMATION FOR DIGITAL BROADCASTING SYSTEM	Ver.5.9
STD-B32	VIDEO CODING, AUDIO CODING, AND MULTIPLEXING SPECIFICATIONS FOR DIGITAL BROADCASTING	Ver.3.8
STD-B60	MMT-BASED MEDIA TRANSPORT SCHEME IN DIGITAL BROADCASTING SYSTEMS	Ver.1.8
STD-B62	MULTIMEDIA CODING SPECIFICATION FOR DIGITAL BROADCASTING (SECOND GENERATION)	Ver.1.6



Association of Radio Industries and Businesses

ARIB SEASON
Publishing

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