



# ABU TECHNICAL COMMITTEE MEETING 2022

New Delhi  
India  
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**Doc T-22/4**

## ABU Technology Activity Report Nov 2021 – Oct 2022

A brief report of activities organised by ABU Technology is given below since the online TC2021 meeting last November. The report looks into two areas; the first part is on Capacity Building Activities; and the second part is on International Cooperation and Contributions.

### 1. Capacity Building Activities

#### **Webinar Series on Member Innovations**

This was a webinar series initiated by ABU TD in November last year. The idea is to get members to share their share and showcase their creative and innovative projects and solutions with others. These solutions implemented by our broadcaster members may allow others to also learn from them and help in finding creative solutions to some of their existing problems. Below are some of the topics shared by our members to date:

#### **Topic: 5G iMango Radio – Create a Radio Program in 5 minutes, 14 Dec 2021**

The innovative project by iMango Radio was presented on 14-December with the topic “5G iMango Radio-Create a radio program in 5 minutes”. It was presented by Mr Pan Ming, Director of Content Department, 5G iMango Radio from Hunan Broadcasting System, China. He discussed in detail background information about 5G iMango Radio System and major features of 5G iMango Radio System. The session also included underlying technology, goals and vision 5G iMango Radio System. Participants got the opportunity to view the visual layout and interface of the software developed and customized by Hunan Broadcasting System, China for several broadcasting functions. Close to 60 participants representing 35 organizations from 22 countries attended this webinar session.

#### **Topic: Full IP UHD remote production: Full-scenario solution, 11 Jan 2022**

The topic “Full IP UHD Remote Production: Full-scenario Solution” was presented by Xie Qin, Senior Engineer and Expert from Shanghai Media Tech, NRTA-China, on 11 January. The session discussed in detail a scheme and infrastructure that combines IP technology with remote production, 5G technology and 4K UHD technology. Shanghai Media Tech developed such remote production system and used for covering different sporting events and games in China. This session attracted over 90 participants from 32 countries.

#### **Topic: Cloud Interview for News Production, 19 Jan 2022**

On January 19th, another session in the series was presented by Edward Ng, Senior Systems Engineer from Phoenix TV, Hong Kong. He discussed a case study on “Cloud based Interview for News Production” developed by our member Phoenix TV. It included hardware and software requirements, System deployment and functions with brief details on equipment & Application used for the cloud interview system in addition to its advantages and limitations. The webinar session was attended by about 65 participants from 25 countries in Asia-Pacific and elsewhere.

#### **Topic: News Room Automation with Cloud based News Data Management, 25 Jan 2022**

The next session in this series was presented by colleagues from Prasar Bharati-India, on 25 January, A panel of speakers from DD and AIR-India discussed in detail on the topic of “Indigenous Development of News Room Automation with Cloud based News Data Management”. The session mainly was focused on News Data Management System (NDMS) and News Room Automation system with cloud applications. The speakers TS

Ramakrishna, K Balaji, R Arul and S Gurumanickam, gave real time demonstration of these application software and their functionalities along with hardware/software requirements. Over 90 participants attended the webinar,

#### **Topic: Hybrid Broadcast Broadband TV Implementation: A Case Study, 29 April 2022**

This webinar on “Hybrid Broadcast Broadband TV Implementation: A Case Study” was presented by Dr Ahmed Zaki of Media Prima Berhad, our member in Malaysia. The presentation outlined the steps in their implementation of HbbTV in Malaysia. The challenges they had and the support they received from all concerned. The service is now available to all Malaysians as part of the Digital TV distribution “Freeview” package, which is the free digital terrestrial TV available in Malaysia. More than 70 attendees representing 24 countries from Asia, Europe and Africa attended the webinar session.

#### **ABU-IRIB Online Workshop on Interactive Media Services, 7-9 February 2022**

ABU Technology together with Islamic Republic of Iran Broadcasting (IRIB), organized a 3-day online workshop on the topic “Interactive Media Services”, from 7-9 February 2022. The workshop was presented as a series of webinar sessions covering the latest media technologies such as AI applications in broadcast, Image/Video Annotation, Intelligent Automatic Music/Text Generation, Deep Fake Detection and IP solutions for Broadcasters. Expert colleagues from IRIB shared their experiences and solutions developed in-house to address some key challenges and requirements. Other topics discussed were about modern technologies needed to deliver broadcast and media services, Quantum theory applications, FPGA and its Applications, IT Service Management etc. The 3-day webinars were attended by over 300 participants representing 37 countries from our members and the region. The recordings and presentation materials are now accessible to all ABU Members via ABU Technology Webinar Archives portal.

#### **ABU Virtual Forum on Cybersecurity and Media**

ABU Technology hosted a two-day Virtual Forum on Cybersecurity & Media from 24-25 May 2022. The Forum discussed latest tools, technologies and best practices to mitigate the risks of cyber attacks in the media industry. Experts from IRIB-Iran, Skyline Communications-Germany and a Industry expert from Technorama-Australia shared their recommendations and experiences to further strengthen and safeguard broadcasters’ networks from potential attacks. More than 600 registered for the two-day online event.

#### **Training Course on Engineering Fundamentals for Broadcasters – Level 2, April – June 2022**

The Level 2 course on Engineering Fundamentals Training Course was organised from 11-April to 20-June. There were over 90 participants who qualified from Level-1 to join the level-2 training course. The course had eight (8) modules on topics ranging from microphones, mixers, cameras, audio video measurements, editing to lighting systems, storage & MAM systems and studio automation & playout systems. Interactive question and answer sessions were organized in each module for participants to get answers directly from course tutors/ resource persons. Certificates have been issued to those who completed the evaluation for all the modules as per requirements.

#### **Workshop on Cloud Technologies for Media Services, 25-27 July**

ABU Technology organized its first face-to-face workshop since the pandemic was announced in 2020. This workshop on the topic “Cloud Technologies for Media Services” was held from 25-27 July 2022 in Kuala Lumpur, Malaysia. The participants got abreast of concepts on cloud computing/platform, broadcast migration to cloud platform & media solutions and cloud-based implementations and services. The topics were mostly presented by experts who joined us in person for the workshop, with 2 presentations that were delivered virtually as some speakers were not able to travel. The virtual presentations were also made live by the speakers with good interaction by the participants. In total 15 topics were presented by 18 speakers/experts from our affiliate members and partners representing Benchmark Broadcast Systems, Amazon Web Services (AWS), IPSB Technology, RCS, Skyline Communications, Harmonic Inc, Rohde & Schwarz, Globecast Asia, Haivision, Winmedia, TVU Networks, Vizrt and Alibaba Cloud. The presentations and discussions addressed key areas such as Cloud technologies, Media workflows, System integration, Distribution, Media Asset Management (MAM), Cloud Implementation methods and case studies. We received an overwhelming response from members for the workshop but unfortunately only 50 participants were allowed to join due to the limited capacity of the workshop venue. These included colleagues from 19 ABU members from 10 countries around the region. It was encouraging to see that

members and colleagues are eager to travel and join such workshops again. The ABU TD plans to organise another face-to-face workshop in the coming months.

### **Webinar on IP Workflows and Remote Production for Broadcasters, 20-22 September**

ABU Technology organized a Webinar series on IP Workflows and Remote Production for Broadcasters from 20-22 September 2022. Over the three days, the webinar sessions looked into OSI & TCP/IP layered architecture, SMPTE Standards and other industry specifications for All-IP Infrastructure. Also covered were IP-based Facilities in Broadcast Environment including remote production. Likewise, typical industry Solutions & Applications on IP-based Workflows were discussed. Experts and speakers from IRIB, TVU Networks, AEQ, Skyline Communications, DVB Project and Harmonic contributed to the sessions providing information on implementation examples and solutions used by broadcasters around the region, and industry updates on IP-based systems including Remote production. The event was attended by over 550 participants over the three days, from 59 countries representing over 150 organizations from the region and beyond.

### **Webinar Series on Satellite Systems and Solutions for Broadcasters, 12-13 October**

ABU Technology organized a webinar series on “Satellite Systems and Solutions for Broadcasters” from 12-13 October 2022. Over the two days, the webinar series discussed wide range of topics related to satellite technologies within broadcasters’ perspective. This included the fundamentals & practical applications and also advanced Broadcasting Technologies in and research in this area. Presentation were delivered by experts Mr Sumeet Goyal, Deputy Director-General at Prasar Bharati, INDIA and by Mr Masashi Kamei, Senior Research Engineer at NHK STRL. The webinar series was attended by about 150 participants from 35 countries representing about 100 organisation around the region.

### **Webinar Series on Archiving and Media Asset Management, 1-4 November**

ABU Technology organized Webinar Series on Archiving and Media Asset Management held from 1-4 November 2022. The webinar sessions covered a wide range of topics related to archive systems for broadcasters including Approaches and Solutions for building, Preservation, and Management of Audio-Visual archives. Also, on the challenges, solutions, storage technologies, software tools, cloud options, practical applications. Experts from Whiteways Systems, Benchmark Broadcast Systems, IPSB Technology, AWS, Arista, Qumulo, Archiware, Archive TV, DAMsmart shared their insights and experiences. Also, speakers from ABU Members RTM-Malaysia and TRT-Turkey provided a broadcasters’ perspectives about their in-house experiences in digitising and management of audio video archives. The event was attended by on average over 150 participants each day representing over 100 organisations from 45 countries across the region and beyond.

### **ABU DBS 2022 Virtual Event, 21-24 March 2022**

The 18<sup>th</sup> edition of the Digital Broadcasting Symposium (DBS) was held as a virtual event from 21-24 March with the theme “**Evolving Media Workflows**”.

Given the situation with the pandemic and travel restrictions still in place by many countries, including Malaysia, we had to organise the event as a virtual event. We enhanced the virtual platform that we used last year making it more responsive and easier to use. Like last year we used multiple online tools and solutions integrated in one platform for livestreaming of sessions, interactivity and networking possibility through live chat. This year we used a cloud-based video switcher to switch between the livestreams for multiple streams. This was a good experience for us using a cloud-based video switching application, as this was one of the key topics of discussion during the conference.



Over 1000 participants joined the event representing 345 organisations from 92 countries.

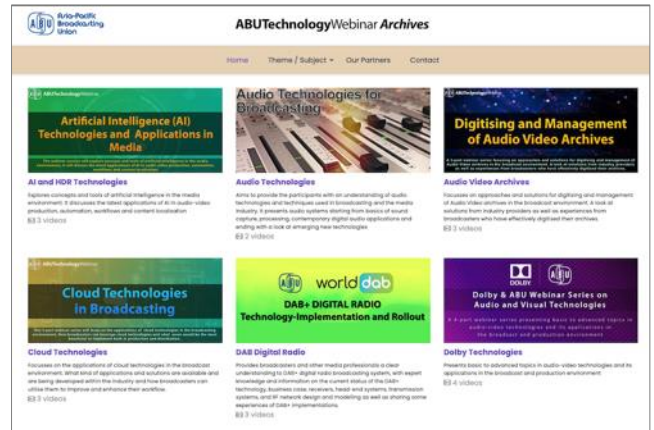
The DBS2022 virtual event was inaugurated by the ABU Vice President and the CEO of Prasar Bharati, Mr Shashi Shekhar Vempati. The event included 12 conference sessions and 5 focused workshops. Over 65 speakers and experts presented during these sessions. We had several of our regulars who joined the platform as industry partners showcasing their products and solutions through video clips and the platform allowed participants to engage in live

chats with these partners if they were interested to discuss.

MYTV Broadcasting in Malaysia joined the event as the Principal Sponsor with IPSB Technology, also a Malaysian company, was the major sponsor for the event. In addition, we also had Whiteways Systems as a supporting sponsor with WorldDAB and DRM who sponsored and presented two workshops. The conference sessions addressed on latest developments in broadcasting technologies, including the use of AI and Big Data applications in media, 5G technologies, Cloud based applications and Cybersecurity amongst others. The DBS2022 virtual platform is still active providing recorded sessions for on-demand access for the participants who may have missed the live sessions or wanted to review the many presentations. These will be made available on-demand until end of April 2022. We would like to thank our members and our industry partners for their valuable contributions and their immense support in making the event a huge success. We look forward to inviting all our members once again for a physical gathering next year for DBS2023 in Kuala Lumpur.

### **ABU Technology Webinars Archive Web portal launched**

ABU Technology developed and launched a Video On Demand platform allowing members access to recorded webinar sessions on demand. The “**ABU Technology Webinars Archive**” platform is made available strictly to colleagues from all members. In order to control access first time users will have to create an account and register on the platform which will provide them access with a username and password. More than 100 webinars covering vast array of technology related topics are made available through this platform. These include all the webinar sessions organised by ABU Technology since April 2020 when the pandemic began. The topics are organised under themes/subjects as they were presented during live webinars. Users can search and filter their topics of interest using the built-in search tools and can easily filter content based on subject, speaker and keyword searches. From now on all webinar recordings will be uploaded to the platform within few days of the completion of the live sessions. The platform is powered via the ABU’s APV cloud application for storage and streaming of on-demand content.



### **Technical Advisory Service (TAS) support for VOV-Vietnam**

ABU received a request from its long time Full Member, Voice of Vietnam (VOV), to assist in drafting its Digital Transformation Plan. ABU Technology arranged two online meeting sessions to provide presentations as a part of Technical Advisory Service to the VOV. There were two sessions, one each in the morning the other in the afternoon, where the expert speakers talked about pertinent issues. Director from Whiteways Systems Singapore, Mr Aale Raza, in the morning gave his perspectives on digital radio broadcasting. In the afternoon session Chief Engineer from TRT-Turkey, Mr Kazim Pektas, discussed details about TRT's digital services and important and latest technologies for the benefit of Public Broadcasters like the VOV. The online discussion was hosted by ABU Technology on Zoom platform 15<sup>th</sup> December. About 20 participants including VOV's top management, senior officials and engineers from the VOV attended the 2 aforementioned sessions. Vice President of the VOV-Vietnam, Mr Vu Hai Quang, welcomed all participants and speakers to the session and gave his remarks on requirements and brief of VOV's Plan.

## **2. International Cooperation and Partnership**

### **Virtual Session on Cybersecurity and Media @ BroadcastAsia 2022 Hybrid event, 2-June**

ABU Technology hosted a session on Cybersecurity & Media during the Broadcast Asia 2022 hybrid event on 2-June. The session was joined by experts from our members NHK and IRIB and also contribution from other industry experts. The session discussed latest technologies and best practices to mitigate the risks of cyber-attacks in the media industry and how broadcasters can prepare themselves for such attacks. The session also heard on the work the World Broadcasting Unions Technical Committee has been doing in coordination with other broadcasting unions. Through this work the WBU-TC has so far issued four recommendations targeting broadcasters with two additional recommendations in the pipeline for this year. These recommendations outline the steps broadcasters can take to be well informed and armed to safeguard their networks from impending attacks.

### **HFCC A22 & B22 Global Shortwave Coordination Conferences**

Due to the ongoing pandemic the HFCC Steering Board decided to organise the A22 Global Coordination Conference virtual rather than in-person. Earlier, it was scheduled to be hosted by the ASBU in Tunis. The A22 Global Coordination was held from 17 January to 4 February 2022 as a virtual event. However, after a break of 2 years the B22 Global Shortwave Coordination Conference was held as an in-person event. The event was held in Sofia, Bulgaria from 22-26 August 2022. ABU Technology promoted the event via its website for the benefit of the HFCC/ABU-HFC members to register and get other important information regarding the shortwave coordination. The plenary meetings were also open to attend online for frequency managers from HFCC members who were not able to travel to Sofia.

### **WBU-TC Meeting, 8-June, France**

The WBU Technical Committee first face-to-face meeting since the pandemic began was organised on 8-June in conjunction with the EBU-TA event, as per the usual practice. The meeting was hosted by France Television in Montpellier, France. The meeting was chaired by the Chairman Mr John Lee. Technical representatives from ABU, ASBU, EBU and NABA were physically presented at the meeting with CBU joining virtually. Some of the important issues from the agenda included the joined work by the unions in preparations for the WRC-23 conference next year. It was discussed to issue a collective declaration by the WBU on behalf of all unions to support the ongoing efforts to safeguard the spectrum allocated for broadcasting services. Also highlighted were the importance educating members on Cybersecurity. It was noted that the an updated version of the recommendation on “Cyber Security Recommendations for Media Suppliers’ Systems, Software and Services” has already been circulated. Another two recommendations on the area of “Social Engineering Recommendations” and “Employee Cybersecurity Training/Awareness” are currently being drafted and will hopefully be finalised and circulated towards second half of the year. One of the highlights of the meeting were the presentations on UHDTV broadcasting technologies updates from the digital broadcasting standards perspective including current developments. The presentations were made by representatives from DVB, ATSC and from ISDB-T. The updates on the work of ISDB-T was presented by Mr Masashi Kamei, ABU TC Vice-Chairman and NHK STRL. Other notable discussions included 5G, 6G and the use of RLANs and Wireless Power transfer interference.

## **3. Publications and Other Projects**

### **Technical Review Magazine**

The Q4/2021, Q1/2022, Q2/2022, and Q3/2022 editions of the ABU Technical Review magazine was published as online e-versions during the period of this reporting. We would like to thank the contributions received from members for these four editions. These and other editions of the TR are available for viewing and download from <https://www.abu.org.my/technical-review>



### **Support to other events**

ABU Technology continues to support other departments in running online events. Notable projects this year so far include the ABU TV-Con event, ABU Digital 2022 event, ABU Sports Group Meeting, the ABU-RAI event and the Pacific Media Partnership Conference all of which were organised as virtual/hybrid events.

