Asia-Pacific Institute for Broadcasting Development Kuala Lumpur, Malaysia

Quarterly 1 **2019** VOLUME 18 NO.1 ISSN: 1675 - 4751



Media Digitisation



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A New Team at AIBD

AIBD gears positively towards an auspicious beginning for 2019 as it welcomes a new leadership team that will manage performance and guide the Institute fulfil its mandate of achieving a vibrant and cohesive electronic media environment in Asia Pacific.

At the last AIBD General Conference (GC) in Colombo Sri Lanka, its members voted India as its new president. Its representative, Mr Shri Fayyaz Sheheryar, Director General of All India Radio, spoke of AIBD "having a lot of potential to do good particularly to poor broadcasters".

The GC also picked three new members, namely, Iran, Maldives and Nepal and reelected two others, Cambodia and Pakistan, of the nine-man Executive Board. It elected Pakistan as its Chair.

Soon a new Director of AIBD will be appointed, ushering in new efforts to seize opportunities and confront challenges that will improve the Institute's value to its members and partners.

The new team will get support from the Institute secretariat's efforts to implement quality management systems covering its core activities in training, consultancy, publication, content production and workshop organisation.

Having received the prestigious ISO 9001:2015 Certification, AIBD gains a new level of competence and credibility towards pursuing initiatives for media development in the Asia-Pacific region. That requires pursuing best efforts to ensure high quality in the delivery of AIBD services and in the performance of the internal functions of the Institute.

With support and guidance from AIBD's members and partners, the new team will face challenges that impact the broadcast industry. These include facilitating even expediting the migration from analogue to digital, creating more compelling content and adapting to new technologies and social media where increasingly people are migrating for media texts.

These challenges will be in the agenda of AIBD's major activity this year, the forthcoming Asia Media Summit (AMS), to be held from 11-14 June 2019 in Cambodia. One of the premiere communications events in the world, the AMS will highlight the theme "Media Digitisation with a Focus on Underdeveloped Markets." Decision makers, media professionals, scholars, and stakeholders of news and programming from Asia, Pacific, Africa, Europe, Middle East and North America are expected to attend this annual conference. They will discuss the impact of the fourth industrial revolution, in particular strategies to deal with Artificial Intelligence, disinformation and fake news, and latest broadcasting technologies as well as new monetisation approaches.

As reported in the last GC in Sri Lanka, AIBD has planned to implement some 50 training projects that will benefit around a thousand broadcasters in the region. These will cover workshops, among others, on emerging technologies, social media, management, content and programme development, Sustainable Development Goals, and Training of Trainers.

No doubt, the new team and the secretariat under a new leadership will need all the support of members and partners as they deal with the pace and magnitude of change in the media landscape. Taking stock of the strategy and operation of the Institute and pursuing effective action are keys to managing AIBD's future.



BROADCASTER VOL. 18 No. 1 - Quarterly 1 2019

Published 4 times a year by the Asia-Pacific Institute for Broadcasting Development

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Design and layout by:

SP-Muda Printing Services Sdn. Bhd.

Printed by:

Percetakan Sri Raya Sdn. Bhd No 82 & 83, Jalan KIP 9 Taman Perindustrian KIP Kepong 52200 Kuala Lumpur Malaysia

The views and opinions expressed or implied herein are those of the authors and contributors and do not necessarily reflect the views of the AIBD.

Broadcaster From the Director's Desk



On behalf of the President I would like to wish all our members a very happy new year. With renewed hope and aspiration AIBD hopes to work together and achieve even greater heights in 2019 and beyond.

Not so long ago dissemination of information was limited to print and broadcast media. New media came and it transformed and challenged the structure of information distribution and consumption. And, now with social media the whole information ecosystem is being redefined. The mainstream media are the hard hit. The pace of technological change is so fast that most of our members, with limited resources, have found it difficult to cope up with the changes taking place around them.

Keeping this in mind we have chosen the theme of this year's Asia Media Summit as "Media Digitisation: Focusing on Developing Markets." It will be held in Siem Reap from 11th to 14th June. The Summit will give our members a platform to learn and know more about digital changes taking place in the industry. It will be an opportune moment for our members to share, learn and unlearn, and work out on various strategies applicable to them.

One of the highlights of the Summit will be a session on disinformation or fake news. The credibility of journalism is increasingly being challenged as the 'information pollution' gets worst by the day. The implications transcend boundaries and impacts citizens and societies. Therefore, we are partnering with various agencies, especially UNESCO, to address this issue not only for the short term but in the long run.

I would like to take this opportunity to thank the Kingdom of Cambodia for agreeing to host the Asia Media Summit, 2019. With the support from our members and the government of Cambodia there is no doubt that the Summit will be a memorable and enriching one.

Looking forward to seeing you in Siam Reap.

Philomena Gnanapragasam Officiating Director

World Radio Day Message

World Radio Day, 2019

On behalf of All India Radio, India's Public Service Broadcaster, I, F. Sheheryar extend my heartiest greetings to each and every member of the Radio fraternity across the globe, this World Radio Day, 2019.

This year's theme, i.e. 'Dialogue, Tolerance and Peace' is a powerful phrase in itself, with implicit and explicit implications that pertain not just to India or the Asia-Pacific region, but to the entire world. Understood in a deeper sense in letter and spirit, the term is a panacea for a world which seems to be ailing in certain key areas of human dignity and cohesion, more so for the last few decades. India's age old approach has been proactively proclaiming the essence of 'Dialogue, Tolerance and Peace' through tenets such as 'Vasudhaiva Kutumbakam' and through the teachings of Ramanujacharya, Kabir and Guru Nanak; in recent times of Mahatama Gandhi, whose 150th birth anniversary year is being observed worldwide.

The Radio sector, particularly Public Service Broadcasting finds itself in a flux today for a flurry of reasons ... a major one being a transition in public psyche in terms of the ability to assess psycho-social impact. Coupled with the glossy media's overarching inclination towards the basal and the banal, lucratively so, this has gravitated general public tastes away from human substance, towards a glitter, most don't even understand as a mirage. This has led to the vicious cycle of an ever widening gap between informed awareness and consumption patterns.

World Radio Day celebrates technological achievements in the Radio sector, but at the same time it is a grim reminder that more needs to be done expeditiously for the benefit of the common human being and his basic needs, to begin with. And this is where Public Service Broadcasters step in. SDGs such as alleviation of poverty, health and wellbeing, quality education and gender equality, the basic pillars of the theme 'Dialogue, Tolerance & Peace' are not marketing money-spinners and naturally will never be of much interest in Board rooms where profit charts are the sole raison d'être. It is only the altruistic Public Service Broadcaster, of course, with adequate help from the respective government that can creatively intervene with its programming content.

All India Radio has had a long history of inclusive catering much on the lines of the coverage areas of SDGs. Here, innovations in programming styles and techniques go hand in hand with preserving time-tested traditional broadcasting formats, just to ensure that the 'not-so-smart' ones are not left out mercilessly. Besides poverty alleviation schemes of the government, individual and institutional attempts at the same are given due weightage in programming. Public health and wellbeing have always been accorded top priority on the airwaves in a number of languages and dialects to enable access to the bottom of the pyramid. AIR with its array of diverse programming and formats, is in itself an attempt by default at imparting quality education free of cost. And there is definitely huge scope in furthering the cause of formal quality education on air, of course with much required support from the right quarters.

Similarly, spreading the message of gender equality and its impact on society has been a major thrust area for All India Radio, throughout its history.

This world Radio Day is a wonderful opportunity to join hands in introspecting if the world could be made a better place, and not just for a few. There couldn't have been a better opportunity to set the tone for the advent of Ritu Basant, the season of spring. Once again, season's greetings to all of you.



F. Sheheryar Director General, All India Radio & President, Asia-Pacific Institute for Broadcasting Development (AIBD)

Asia Media Summit 2019 Media Digitisation: Focusing on Developing Markets

Hosted by: Ministry of Information, Cambodia

Preparations are in place for the Asia Media Summit 2019 with the theme "Media Digitisation: Focusing on Developing Markets" to be held from 10 – 14 June 2019 in Siem Reap, Cambodia.

The Summit will focus on the impact of the digital revolution that has usher in a new era of cautious optimism among broadcasters in Asia Pacific. It will examine policies and strategies to help broadcasters in developing countries catch up with the fast-changing technological developments in the digital world. It will also look at best practices from developed countries that have embraced technology innovations and that can be shared with broadcasters in developing countries.

AIBD Members, partners as well as other media stakeholders are expected to participate in the conference that features eight plenary sessions and six pre-summit workshops.

Organised by AIBD, the Summit is hosted and supported by the Ministry of Information, Cambodia.

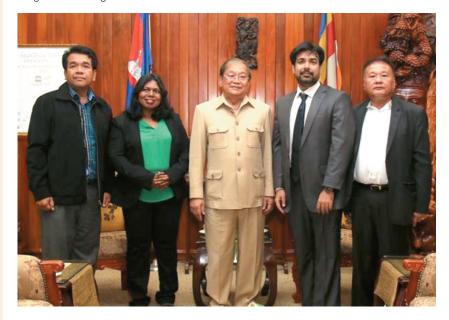
The Summit will cover topics on how broadcasters can adapt to the digital revolution, media in the 4th industrial revolution, integration of the latest technologies in content creation, disinformation and new media, monetization in traditional and new media, technologies for distribution of media content, and preservation our time through archives.

A highlight of the event is a roundtable among CEOs of broadcasting networks who will discuss digitisation and its impact on media credibility.

The pre-summit workshops will feature subjects on fake news and disinformation, 4k technology, keeping radio relevant, AR/ VR content production, and a masterclass on leadership in transformation.

Cambodia's Information Minister, AIBD Officials Discuss AMS Preparations

By **Syed Nabeel Tirmazi** Programme Manager



Cambodian Minister of Information Khieu Kanharith recently discussed with AIBD officials the preparations for the Asia Media Summit 2019 to be held at the historic city of Siem Reap from 11-14 June 2019.

With Cambodia hosting the AMS 2019, Minister Khieu said they will work closely with AIBD in ensuring a highly informative and productive summit with the theme "Media Digitisation: Focusing on Developing Markets". He also said that the summit will be useful to Cambodian media practitioners in enhancing their skills and knowing the latest journalistic standards.

Ms Philomena Gnanapragasam, AIBD Interim Director, and Mr Nabeel Tirmazi, AIBD Programme Manager, paid a visit to the Cambodia Information Minister in Phnom Penh on 10 January 2019 to follow through summit preparations. They said the meeting was successful.

At the city of Siem Reap the following day, they met management officials of Sokha Siem Reap Convention Center, the summit's venue. They were joined by officials from the Ministry of Information, Cambodia.

On 11th January 2019, AIBD officials attended the annual gathering of Cambodian journalists hosted by Prime Minister Hun Sen. During his address to the gathering of 5,000 journalists, the Prime Minister stressed the importance of cyber security and access to information to deal with the challenges of fake news.

The AMS 2019 will have eight plenary sessions discussing the impact of the fourth industrial revolution and subjects dealing with artificial intelligence, latest technologies in broadcasting distribution, strategies to overcome disinformation/fake news, and broadcasting monetisation strategies, among others.

The AIBD General Conference and its associated meetings will be held in Bhutan from 22-24 August, 2019. The President of the General Conference has agreed to the above dates.

The interim director, Mrs Philomena and the programme manager, Jigme Thinley, made a site visit to Bhutan from 26th to 31st January, 2019. During the visit the two officials from AIBD discussed with the officials of the host organisation, Bhutan Broadcasting Service Corporation (BBS).

On behalf of the President and the AIBD, the interim director expressed appreciation to Bhutan and the BBS for agreeing to host the 45th Annual Gathering/18th AIBD General Conference and Associated Meetings. She said that Bhutan is a country where age-old culture and tradition is still vibrant and many members of the AIBD would look forward to the meetings. The peace and tranquility in Bhutan will be a perfect ambience to hold the meetings successfully, she added.

The interim director also made a courtesy call on to the Cabinet Secretary, Mr Kezang Wangdi, who is also the chairman of the BBS board of directors.

Mrs Philomena thanked the BBS management, especially the Chief Executive Officer, Mr Tshering Wangchuk, for taking a lead role in planning ahead of time. The BBS has already formed a core team to work on this.

The interim director also visited the hotels in Paro, where the meetings will

Bhutan Gearing Up to Host GC, 2019

By **Jigme Thinley** Programme Manager, AIBD



AIBD Interim Director presenting memento to Cabinet Secretary and Chair of BBS Board, Kezang Wangdi



Meeting with the BBS core team for the GC

take place. The Conference will be held at Zhiwaling Heritage, a unique and exotic local five-star hotel. The hotel is identified as one of the unique lodges of the world by the National Geographic. On the sidelines of the visit, Mrs Philomena also met with the Executive Director of the Bhutan Media Foundation, Mr. Needrup Zangpo, and discussed on media landscape in Bhutan and the Asia-Pacific and forging future partnerships.



Zhiwaling Hotel, where the GC will take place



The executive director presenting a memento to the AIBD interim director

Events / News

AIBD Achieves ISO 9001:2015 Certification

By **Utpal Kanti Mandal** Quality Manager, AIBD

AIBD initially was awarded the Quality Management Certificate, ISO 9001:2003 and ISAS BC 9001:2008 in 2009 as a reflection of its competence and credibility towards pursuing initiatives for media development in the Asia-Pacific Region. AIBD got re-certified on meeting the requirements of ISAS BCP 9001:2010 in October 2012 and also in October 2015 validated till October 2018. The certificate includes AIBD's Quality Management systems and its core activities in training, consultancy, publication, content production and workshop organisation.

Considering the nature of the activities of the Institute, AIBD decided to transit to ISO 9001: 2015 at the expiry of ISAS BCP 9001:2010 certification in October 2018. The new standard ISO 9001:2015 is the fifth edition and it replaces the fourth edition (ISO 9001:2008) which has been technically revised, through the adoption of a revised clause sequence and the adaptation of the revised quality management principles and of new concepts. The staff members of AIBD had been working on documentation quite some time for the compliance of the new standard.

M/s SGS (Malaysia) Sdn Bhd, the certification body in Malaysia, conducted the External Audit in two stages. Stage 1 audit was done on 17 August 2018 to determine conformity of AIBD management system and its ability to ensure applicable statutory, regulatory and contractual requirements are met. Finally, the stage 2 audit was conducted by SGS Auditors on 19 September 2018. The audit methods used were extensive interviews, observation of the activities and review of documentation and records as evidence for maintaining the

Certificate MY18/1811029799

The management system of

Asia-Pacific Institute for Broadcasting Development

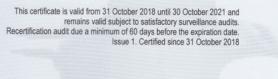
2nd Floor, Old IPPTAR Building, Angkasapuri 50614 Kuala Lumpur MALAYSIA

has been assessed and certified as meeting the requirements of

ISO 9001:2015

For the following activities

Training, Consultancy, Publication, Content Production, Conference & Workshop Organization





quality management system as per the requirements of the new standard.

SGS (Malaysia) Sdn. Bhd on 07th October 2018 conveyed that AIBD successfully underwent through stage-2 audit and was recommended for registration to ISO 9001:2015 Standard. Subsequently in November 2018, AIBD received ISO 9001:2015 Certificate from M/s SGS United Kingdom Ltd with validity from 31 October 2018 until 30 October 2021 subject to satisfactory surveillance audit annually.

UKAS IANAGEMEN SYSTEMS

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The Institute invariably makes best efforts to maintain the effectiveness of the organisation by ensuring the high quality of the AIBD services and performance of the internal functions of the Institute.

AIBD Observed World Radio Day, 2019 By Syed Nabeel Tirmazi Programme Manager

In collaboration with UNESCO, AIBD observed 'World Radio Dav' on 13 February 2019. AIBD invited its members to not only observe the day but to take part in AIBD activities by sharing their experiences and challenges.

The theme of this year was 'Dialogue, Tolerance and Peace'. Considering the theme, members discussed various sustainable development goals and how radio industry is creating awareness among its listeners.



Mr António Guterres

UN Secretary general, Mr António Guterres, stated that radio is a powerful tool and even in today's world of digital transformation, radio reaches more people than any other media platform. For United Nations, especially in peacekeeping operations, radio is a vital way of informing, reuniting and empowering people. "Thus, we should recognize the power of radio to promote dialogue, tolerance and peace."

The AIBD General Conference President. Mr F. Sheheryar, stated that World Radio Day celebrates technological achievements in the radio sector, but at the same time, it is a grim reminder that more needs to be done expeditiously for the benefit of the common human being and his basic needs, to begin with.

In respect of theme, AIBD organised three web presentations for the members and partners. Mr Anthony Frangi, delivered his session on importance of radio during natural disasters. The presentations of Mr Martin Liss and Mr Steve Ahern from



Mr F. Sheherya

the pre-workshops held in New Delhi in May 2018 were also included in the stream. The topics were on integrating social media with radio programming and engaging listeners.

AIBD also provided the video message by U.N secretary General and audio messages by Mr Steve Ahern and Mr Anthony Frangi to its members, which they broadcasted during their programmes.

Under the theme of 'Dialogue, Tolerance and Peace', members of AIBD organised rallies, broadcasted special programmes and arranged seminars. The programming also featured the UN's Agenda 2030 of sustainable development goals, especially goals related to poverty, health, education, gender, water, economic growth, sustainable cities, climate change and peaceful institutions.

AIBD has also announced this AIBD Radio Awards for this year, the themes are:

- AIBD Radio Awards 2019: Rural Women: Tapping the power within
- Reinhard Kuene's Memorial Award 2019: Vanishing Sounds

First theme will look forward to the stories related to the challenges of women living in rural and remote areas, especially where they do not have the basic resources to survive. Domestic abuse, slavery, trafficking, child marriages become far worse when combined with poverty and unheard.

AIBD Radio Awards will seek voices of women activists from rural and remote areas, where they play a significant role not only to improve their own lives but also other fellow unprivileged women around them, on their own with no external help.

Second theme will try to explore the dying musical instruments of various cultures. The Reinhard Kuene's Memorial Award 2019 is looking forward to receiving impactful stories about how traditional musicians are surviving and reviving the musical instruments in this age of digitised musical era.

The presentations, programmes submitted by the members and other resources related to radio broadcasting will be available to all members on request.

Kindly email at nabeel.tirmazi@aibd.org. my for more information.





Chang Jin Completes Service as AIBD Director – A Tribute



Mr Chang Jin completed his more than three years of service as Director of AIBD on December 16, 2018. During his term, he successfully conducted with help from members and partners and the secretariat three Asia Media Summits (AMS) from 2016 to 2018, and helped improve funding support for the Institute. He also introduced a series of research studies entitled the AIBD Annual Media Research (AAMR) in cooperation with partner institutions and member countries. These research activities served to enhance discussions during the AMS.

Appointed as Director of AIBD on 15 January 2015, Mr Chang Jin led the implementation of the Institute's regular projects, in particular, training workshops covering topics on content, technology, management, and new media that served its member organisations in the region. More than 700 broadcasters benefitted from 31 training activities within the period of 1^{st} July 2017 to 30^{th} June 2018.

To seek support for the Institute's initiative on development programme, the AIBD secretariat through his leadership signed a contract with UNDP to collaborate on Sustainable Development Goals (SDGs)related activities in the APAC region.

During the AMS 2017 in China, Mr Chang Jin steered the process of getting approval of the "Qingdao Declaration on Media and the World's Sustainable Development" by delegates from more than 40 countries and regions. The Declaration mentions the pressing challenges facing our world that beg for urgent and concerted action. It also strongly recommends that media, governments, UN Agencies and international non-profit organisations work in a coordinated manner to promote development and progress of the world, and shoulder responsibilities of sustainable development together. landscape of the broadcasting industry in Asia Pacific, the role of broadcasting media in communication for development, and a survey that reflected the status of radio, television, film and new media in storytelling, and revealed the relationship between traditional media and new media, after years of competition, convergence and interaction.

During his stint, Mr Chang Jin solicited support from the Communication University of China (CUC) to translate the AAMR on the role of the media in relation to (global) (sustainable) development, and what they do in their coverage of development (issues/goals) into Chinese and produce a Chinese version in time for the AMS 2017 in Qingdao, China.

At the 44th Annual Gathering/17th AIBD General Conference and Associated Meetings in Colombo, Sri Lanka on 3 August 2018, Mr Chang Jin opened for discussion the proposed strategic plan from 2018 to 2022, which members said needed further examination.

In the same event, he was proud of what he had achieved in the Institute and sought continued support from members as AIBD "becomes better and better."



Dr Hasan Mahmud serves as the new Information Minister of the People's Republic of Bangladesh. Prior to his appointment, he held various government posts including as Chairman of the Parliamen-

New Information Minister for Bangladesh

tary Standing Committee of the Ministry of Environment and Forest, former Minister of the Ministry of Environment and Forests, and former State Minister, Ministry of Foreign Affairs.

The AAMR project covered studies on the

He completed his BSc Honours and Master's degree in Chemistry from Chittagong University (CU) in 1987 and 1989, respectively. The Minister obtained his higher degree on international politics from Geneva in 1996. He also finished another post-graduate study in Environmental Science from the Breeze University of Brussels in Belgium in the same year.

Dr Hasan obtained his PhD degree in Environmental Chemistry from Limburg University in 2000-2001. Active in politics since his student life, he served as the Senior Vice-President of Bangladesh Chhatra League (BCL) unit at CU in 1986 and President in 1989-90.

Dr Hasan was also the General Secretary of the Belgium chapter of Awami League (AL) since 1995 until he returned home in 2001.

Netflix **NETFLIX** Becomes AIBD Member

Netflix is the world's leading internet entertainment service with over 130 million memberships in over 190 countries enjoying TV series, documentaries and feature films across a wide variety of genres and languages. Members can watch as much as they want, anytime, anywhere, on any internet-connected screen. Members can play, pause and resume watching, all without commercials or commitments.

Headquartered in Los Gatos, California, Netflix employs approximately 3,700 people globally.

Netflix is a global internet entertainment services network offering movies and TV series commercial-free, with unlimited viewing on any internet-connected screen for an affordable, no-commitment monthly fee. Netflix is a focused passion brand.

We don't offer pay-per-view or free adsupported content. We are about flat-fee unlimited viewing commercial-free. We are not a generic "video" company that streams all types of video such as news, user-generated, sports, porn, music video, gaming, and reality. We are a movie and TV series entertainment network. We strive to be extremely straightforward. There is no better example of this than our no-hassle online cancellation. Members can leave when they want and come back when they want.

We are about the freedom of on-demand and the fun of binge viewing. We are about the flexibility of any screen at any time. We are about a personal experience that finds for each person the most pleasing titles from around the world. To deliver this experience to our members, we expect to spend around \$1.3 billion on technology & development in 2018.

Netflix is available virtually everywhere except in China, (where we will license our content for the next few years). Our growth internationally will unfold over many years as we improve our service. In the 130+ new markets we launched in 2016, we started by primarily targeting outward-looking, affluent consumers with international credit cards and smartphones. As with every market we've launched, our approach is to listen, learn and improve rapidly, adding more content, languages and a better Netflix experience over time to delight members.

We understand that awareness of Netflix in these new markets is mixed and that there are cultural differences and some variances in content tastes around the world. There are also challenges with the broadband and payment infrastructures in certain countries. But we also believe in the growing ubiquity of the internet and rapid technological progress and that great, high-quality storytelling has universal appeal that transcends borders.

That's why we are increasingly licensing content on a global basis, so Netflix members everywhere in the world can enjoy the same movies and TV series, free of legacy business models and outdated restrictions. In addition, we are developing a growing number of non-English language originals from places such as Mexico, France, Italy, Japan and Brazil. With our global distribution, Netflix is well positioned to bring engaging stories from many cultures to people all across the globe.

As Netflix expands globally, we understand that consumers and governments' expectations will rise. We expect to meet those expectations and work with policymakers to ensure that the old policies that applied to linear TV are not reflexively applied to internet entertainment.

We believe our goals align with AIBD's vision of aiming to achieve a vibrant and cohesive electronic media environment in the Asia Pacific region through policy and resource development. Netflix will be honoured to be a member of the Institute to advocate future initiatives.

5G Technology and the Future of Media By Samseog Ko (PhD) Standing Commissioner of Korea Communications Commission



Multiple users can enjoy karaoke in virtual reality (VR) based platform utilising music files or video clips from K-Pop boyband and EXO's songs such as 'Growl', 'Power' with the artists' voices digitally removed.

A car senses the driver's mood and physical state to customize music selections and temperature settings, creating the ultimate driving environment. The car converses with the driver like a friend and offers restaurant recommendations. Kids in the backseat experience interactive content with VR glasses to watch movies and play video games.

These are not scenes from a futuristic movie. Global telcos, electronics companies and automobile companies showcased these very technologies this year at CES (Consumer Electronics Show) 2019, held in Las Vegas from January 8 to 11 2019.

At the event, Verizon CEO Hans Vestberg noted in his keynote speech, "5G will change everything – 5G is the promise of so much more than what we have seen from wireless technology". A number of reports on CES 2019 highlighted 5G along with artificial intelligence (AI) as this year's keywords, demonstrating the potential of 5G to change the future of humanity.

While the two scenes mentioned above involve technologies such as AI, big data, autonomous vehicles, and virtual reality,



Source: www.mirae-biz.com/news/articleView.html?idxno=43960

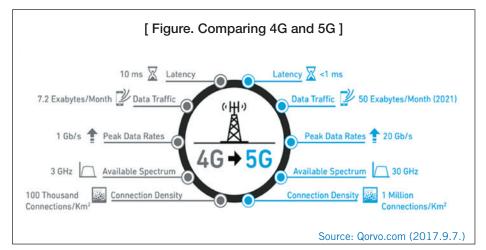
taking these technologies out of the lab and into the daily lives of ordinary people requires a 5G network environment.

Unlike 4G, which simply made Internet speeds faster, 5G has the potential to revolutionise the world through networks because of three specifications: enhanced Mobile Broadband (eMBB), Ultra Reliable Low Latency Communications (URLLC), and massive Machine Type Communications (mMTC).

Boasting a peak data rate of 20Gbps, 5G is 20 times faster than 4G(LTE-A). At 1ms, 5G latency is one-tenth that of its previous generation, and over 10 times more devices can connect at the same

time. With increased throughput, lower latency and more devices able to connect simultaneously, users will utilise services in near real-time, and the days of waiting for the server response will become a distant memory.

Furthermore, unlike experiences with 2G, 3G and 4G, 5G (IMT-2020) is settling in as a single technology without serious standardisation challenges. As such, telcos and equipment and device manufacturers show no hesitation in moving to adopt the technology, making early commercialisation more viable. Additionally, 'network slicing', a powerful virtual network architecture, enables one physical 5G network to operate like



many, creating potential for a myriad of business applications.

Last February, the Republic of Korea debuted 5G pilot service at the PyeongChang Winter Olympic Games and demonstrated new forms of broadcasting. People enjoyed 360 degree views of events with time slice technology and observed the action from any spot in the venue with the "Omni View" feature on VR devices. Additionally, last December Korea introduced the world's first commercial 5G network for business users and this March it plans to be another "first" by commercialising 5G service for mobile communications for the general public.

Of course, 5G service commercialisation will first yield benefits for the telecommunications industry, which built the necessary infrastructure and facilities. However, no matter how outstanding a communications network may be, it becomes useless unless it materialises value-added offerings based on this underlying network. In other words, more value will be created from the software side, such as content and services, rather than the hardware of networks. You could say that 5G will accelerate the rise of the media and content. One media expert described the upcoming phenomenon with this comparison: if the computer was brought into the smartphone in 4G, then the TV will be brought into smartphones in the 5G era.

5G technology will transform content creation and the media industry structure in four key ways:

First, 5G technology will enhance resolution and response times, which were the weakest links in immersive content, increasing the production and distribution of immersive content such as VR, AR (augmented reality), 4D, and hologram technology. The days of passively watching a transmission of video content that some producer made are fading. Nowadays consumers prefer to immerse themselves in the screen and interact with a scene from various angles, as if they were actually there. Before, we could only watch media in a 2-D fashion, only from the front. But immersive content calls for not only views from the front, but also the back, sides,



Source: Holoride, www.cnbc.com/2019/01/10/at-ces-2019-self-driving-cars-with-vr-and-facial-recognition.html

above and below. 5G networks make it possible to transfer these massive files without latency.

Second, mobility service competition will intensify with ultra broadbrand, ultra low latency, and hyper connectivity. Currently people are limited to experiencing VR in fixed locations, like VR experience zones. With 5G commercialisation, you can experience immersive content not just in your living room or theme parks, but on the go in your car or on the subway. And once autonomous vehicle technology develops further, you will be able to enjoy broadcasts, movies, games and more from the comfort of your car. Cars will become moving movie theaters or gaming rooms. The possibilities enabled by 5G explain why automobile manufacturers are scrambling to develop mobility services.

Third, there will be more real-time content and live broadcasts. In addition to consuming premium content on 5G without lag or disruptions, people can now easily create content with their smartphones, GoPros, or drones and share their work on platforms like YouTube or Facebook Live. This aspect will be most apparent in delivering the news, where live broadcasts on-site are so critical. In addition to traditional broadcasters' live feeds, 5G will pave the way for ordinary people to stream the news as it happens without any edits.

Fourth, **network operators will delve further into content creation.** In contrast to the early days of the telecommunications industry, these days there's less value created from simply installing networks; more and more telcos invest in and build the network infrastructure only to have content platforms like Google, Facebook, and Netflix reaping the rewards. Telcos are recognizing the need to dump the "dumb pipe" and are focusing on new business models for 5G. Big name mergers to enter the media industry are prime examples of this trend. Of course there were telcos vertically integrating media companies before the 5G era, like the acquisition of Time Warner by AT&T, but this type of activity will become much more common. Moving forward, companies will realise they will have to embrace their former competitors as partners in order to survive in this new environment.

In fact, at the CES this year, Korean telco LG U+ created a joint fund with Google (parent to YouTube) and plans to showcase 3D-based VR video content in the first half of this year. Last year, LGU+ also strategically entered into a partnership with Netflix, allowing Netflix's services to be viewed on LGU+'s IPTV without a separate set-top box installation.

5G is no longer just fancy tech jargon, but a key technology that will actually revolutionize our future, particularly the future of media. 5G alone can enable great transformations, but adding next-generation technology like AI, big data, autonomous vehicles and convergent services to the mix will truly bring about disruptive technology beyond our imagination. Therefore, it's important to not think of 5G as solely the purview of the telecom industry. The time has come to seriously consider the changes 5G will materialize in the media industry and our future.

Bangladesh' Information Ministry Pledges Support for Community Radio Stations

By AHM. Bazlur Rahman-S21BR

Chief Executive Officer Bangladesh NGOs Network for Radio and Communication (BNNRC)



Community media representatives meet the new Information Minister, Bangladesh

A high-level delegation from the Bangladesh NGOs Network for Radio and Communication (BNNRC) recently met with newly appointed Information Minister Dr. Hasan Mahmu, and discussed developments of community radio stations in the country.

Delegation officials said 18 community radio stations are on-air in the country, aiming to ensure empowerment and right to information for the rural community. They are broadcasting altogether 160 hours programmes per day on information, education, local entertainment, and development motivation activities. Around 1,000 young people and women are working with those stations throughout the country as rural broadcasters. Another 15 community radio will start broadcast by end of this year.

Dr. Mahmud welcomed the delegation and assured them of his cooperation to further develop community radios in Bangladesh. The meeting took place at the Bangladesh Secretariat in Dhaka. Mr. Rezaul Karim Chowdhury-S21K, Chairperson of Bangladesh NGOs Network for Radio and Communication and Executive Director of The COAST Trust, led the delegation.

They presented Minister Hasan Mahmud with a bouquet of flowers and a crest. Mr Abdul Malek, Secretary, Bangladesh Ministry of Information, was also present.

The delegation team updated the Information Minister about the efforts of 18 community radio stations to make the 11th Parliament Election 2018 as free, fair, participatory and accountable. They added that all 18 community radios broadcasted 1152 hours programmes from December 27 till December 30 continuously.

Songs on liberation war enriched with non-communal empathy and emotion,

patriotic songs, instructions and announcements of Election Commission, jingle, PSA, audio clips; drama based on Liberation War, the role of voters and civil society, law and enforcement authority and interview of freedom fighters were broadcasted. Besides, radio talk show and community dialogue were organised with the participation of local professionals and select government officials.

A total of 100 community radio reporters were engaged in collecting electionrelated information continuously. They also captured interviews and vox populi of police officers, election candidates, and voters, statistics of male & female voters and number of the booths, the situation of local constituency units and live to broadcast of the general election results from the Returning Officer.

Mr AHM Bazlur Rahman-S21BR, Chief Executive Officer, Bangladesh NGOs Network for Radio and Communication (BNNRC) and Mr Mustafa Kamal Akanda, Assistant Director of Coast Trust also joined the delegation.



Regional Workshop

Understanding OTT, IBB Technologies and their Value-Added Services

By **Utpal Kanti Mandal** Programme Manager, AIBD



Integrated Broadcast-Broadband (IBB) systems combine both broadcast and broadband technologies providing high quality, flexible, interactive, and personalised services. Broadcast provides efficient delivery of high quality information to a number of viewers at the same time. Broadband enables flexible and personalised services. In connected TV, the consumer has access to all IP services via a standard IP interface typically accomplished via WLAN or Ethernet. HbbTV as a more broadcast-centric type of connected TV allows seamless interlinking of broadcast and IP services making use of the architecture of connected TV. HbbTV also supports services not linked to broadcasting, thus making it applicable for platforms, portals, and to what is known today as "OTT-services".

The Asia-Pacific Institute for Broadcasting Development (AIBD) and Asia-Pacific Broadcasting Union (ABU) jointly conducted the 6th Regional Workshop on Over-The-Top (OTT) and Integrated Broadcast Broadband (IBB) Technologies and Services during 23rd to 25th October 2018 at Kuala Lumpur Malaysia.

This three-day workshop addressed some of the main issues that broadcasters are facing when they want to introduce OTT and IBB services within their workflows and delivery portfolio. It not only explored the technology but also looked at other value added services and business opportunities that they could introduce to attain a competitive edge in the market place. This year's workshop focused on advancements in technological aspects and its impact on business. Case studies from Asia-Pacific region were presented with some reference to European implementations. The AIBD and ABU continue to lead the way in helping its members make use of emerging delivery technologies. Over 60 participants from 18 countries shared their experiences during 15 sessions; among the topics were Hybridcast, HbbTV, IP based media production, receive devices, catch up VOD services, immersive audio and video, online media distribution, Cybersecurity, Hybrid CDN. Over the three days, discussions covered a variety of technologies, infrastructures and services connected with IBB and OTT. Throughout the three-day event fifteen speakers, representing AIBD and ABU members both from broadcasting and solution providers, industry and regulators, shared their knowledge and experiences.



At the beginning of the workshop, Mr Mardhiah Nasir, Vice President Integriti Padu, talked about the "Future of TV-Focusing for Broadcasters, Telcos and Content providers". He also highlighted areas on what's really driving the OTT trend right now and where it is heading. Mr. Masaru Takechi of NHK in the next session provided an update on Hybridcast, its current & possible services and other related developments, including Internet of Things (IoT). He explained both HbbTV and Hybridcast engines are based on a





HTML 5 browser technology. HTML5 is the core in both Hybridcast and HbbTV2 thus harmonizing between them.

Mr Mika Kanerva, COO- Sofia Digital explained HbbTV features, updates and HbbTV trends in 2018. He discussed the typical architecture for HbbTV solution and application Apps. He explained how authoring and development of application programme interfaces (APIs) are done for integrated broadcast broadband services. Ms Teresa Cheung, Managing Director HK, Eurofins Digital Testing, Hong Kong, presented quality assurance (QA) and cybersecurity strategy for OTT and IBB platforms. She also talked about organisational cybersecurity and device cybersecurity.

Mr Jiri Vorisek, Chief Marketing Officer-Hybrid Company, affirmed the Reality Check: IBB is not the 'Next Big Thing:' It is already the 'Now Big Thing.' He explained various phases of IBB and Hbb TV development starting from year 2013 to date. The phases are ideas and development; Content development; Content delivery based on data (Monetisation); and absolute personalisation.

The second day started with the presentation of Mr Asaad Sameer Bagharib,



Director - Thinking Tub Media Pte Ltd, Singapore, on the topic "From Broadcasting to IP-tizing - The Recipe for Survival". He opined that broadcasters need to ensure that content are readily distributed effectively using IP. create social media content and be able to unify various media contents within OTT ecosystem. Mr. Stefan Meltzer of Fraunhofer IIS, Germany, delivered MPEG-H Audio Immersive & Interactive Audio System. He provided a brief comparison of Dolby Atmos versus MPEG-H Audio. He also mentioned some success story of MPEG-H Audio deployment for Terrestrial UH-DTV Services in South Korea.

Mr Jew Kok Lim, Aspera (IBM), talked about the acceleration of file transfer. In his video presentation, he explained that various products are using a wide range of algorithms to facilitate the accelerated file transfer. He also described how such accelerated file transfers helped in carrying out broadcasting events.

Ms Anne-Laure, Cedexis, Singapore, presented Multi-CDN for future media operations. She explained how such an architecture and system could enhance media delivery over networks. Mr Bram Tullemans, Project Manager (Broadband Technology and Online Services) of EBU Technology and Innovation, made a contribution from Geneva on Hybrid-CDN pilot project EBU-flow via cloud.

On day three, Mr Geoffrey Low, Content Engineer- Dolby Laboratories, provided an overview of Dolby Technologies' experimental trends on OTT platforms and how they can enhance the user experience. He elaborated on the features of Dolby Atmos, Dolby, Vision, Dolby Audio, Dolby Cinema and Dolby Voice and explained the hybrid approach to Immersive Sound.

Dr Leon Mun Wai Yuen, Sony EMCS (Malaysia), presented the 'IBB & OTT: A Receiver Manufacturer's Perspective -Preparing your DTT Receiving Equipment Specifications (STBs, TV sets and antennas)'. He explained how SONY as a device manufacturer tries to improve the user interface (UI) which is an important aspect of better user experience (UX). Ms Ima Imaliana Binti Muzni of Media Prima presented the Digital TV Service setup and challenges of Integrated Broadcast Broadband System (IBB) in Malaysian context. She explained Malaysian my Freeview DTT services and described Hbb TV development stages in detail.

Participants also had the opportunity to visit Radio Television Malaysia (RTM) radio and television facilities including their Hbb TV development lab. This was the sixth workshop in the series on IBB and OTT Technologies and Services, conducted successfully since 2013.



Regional Workshop

Telling Compelling Data-Driven News Stories

By **Arun Karki** Independent Data Journalist, Nepal



On 3rd October 2018, 31 journalists gathered at the ASEAN Data Analytics eXchange (ADAX) hall, Bangsar South, Kuala Lumpur, to participate in a threeday day Regional Workshop on Data Journalism. Jointly organised by AIBD and Institut Penyiaran dan Penerangan Tun Abdul Razak (IPPTAR), the workshop was supported by Malaysia Digital Economy Corporation (MDEC).

The three-day long workshop was aimed at understanding the concept of data journalism among the participants, who were mostly from TV and radio stations based in the Asia-Pacific region. Journalists from Radio TV Malaysia (RTM), Bangladesh, Fiji, Macau, Seychelles, Sri Lanka and Vietnam including communication professionals at Malaysian government institutions participated in the workshop.

Throughout the workshop, participants learned about data analysis and creation of multimedia tools, enabling them to apply the acquired set of skills when they return to the newsrooms of their respective media organisations. They gained knowledge about ways to access, refine, analyse and visualise the data – in order to tell compelling data-driven news



stories as well to improve their regular news reporting skills.

The data journalism workshop was led by AIBD consultant Arun Karki, a data journalist and trainer based in Kathmandu, Nepal who has trained dozens of journalists in Nepal.

During the workshop, the participants gained hands-on experience with practical exercise sessions that helped them understand how to interpret data, generate contents both for mainstream and social media and engage more audiences or viewers.







DAY I: From Evidence to Story

The first day began with the brief discussion on - what inspired participants to get into data journalism. After the fifteen-minute warm up talk, they learned the history of data journalism and its emerging trends in Asia. They came to know the difference between data and statistics, and importantly why data journalism, an evidence-based reporting, is important in today's fast-changing digital era.

Before practicing or working with any datasets, they acquired the knowledge of 'Open Data' – the data available on public domain for the purpose of free use, reuse and redistribute. The participants then checked few online data portals of government and non-governmental agencies where sectorial data is publicly available, which journalists can access and dive deep to get stories.

Then came the next primary focususing web based tools to scrape and convert different format data tables into a 'open-source' format – a universal and compatible one. They obtained techniques to extract tables from web portals and convert files into spreadsheet in order to make it analysable.

The participants also learned Google advanced search techniques to find contents with specific criteria from searches and exploration of datasets and tables on the web.

Likewise, at times when the world is coping with fake news, the participants learned about the 'Metadata' – set of data that describes and gives information about other data – which is helpful to verify or fact-check the viral contents.

DAY II: Working with Excel Data Tables

On 4 Oct. participants learned specific techniques to clean and analyse the Excel data tables - in a journalistic way -as well as to bulletproof their story leads and statements. Firstly, participants learned to refine dirty or messy data tables. Secondly, it was sorting, filtering and making simple mathematical calculations inside the Excel spreadsheet tables by applying different parameters or measurable factors. The participants first worked on self-created Excel table in which they learned to use simple formulae, functions and calculations to get different results as per their story angles and requirements.

One of the participants Ms Manonmani Veramohan, an RTM radio journalist, said that the data was totally a new but interesting topic for her.

"This what I should pick on and take it further".

Reacting to one of the short videos screened during the workshop, Ms. Manonmani said, "the animated datadriven video story especially encouraged me so much. I have never imagined before that such sort of work is doable using open data".

At the end of the second day, participants gained the solid understanding of

four different steps or process of data journalism.

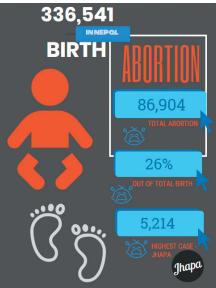
DAY III: Generating Data-driven Multimedia Contents

The last day of the workshop focused on working with infographics creation and mapping tools. The participants were taught to use Venngage, Infogram, JuxtaposeJS and Google Earth Pro to visualise the data they refined on the second day of the workshop. Using such data visualisation tools, all the participants were able to create infographics from the given datasets. They also generated interactive mapping contents showing frame comparisons of satellite imageries taken on different date and time.

Before the close of the workshop, the participants were able to showcase their beginners' infographics pieces which were so informative and creative even to the eyes of the consultant himself.

Nitesh Raniga, Web Officer at Fiji Broadcasting Corporation, who remained active and engaged during the workshop said that he would use the learned skill







sets into the next general election of Fiji that is taking place on November, 2018.

"Election time is a unique opportunity for me to work with huge and various datasets

Media has become a core component that determines the quality of life. It has become imperative for the users to be media literate, not only to consume the media, but also to have education and information about their own rights. Since 2005, the Korean Government has been establishing Community Media Centers around the country, through the mutual interaction of Korea Communication Commission (KCC) and Community Media Foundation (CMF).

To further this aim, the KCC in collaboration with CMF and organised by Asia-Pacific Institute for Broadcasting Development (AIBD), hosted the first ever Regional Seminar on Community Media Centres in Seoul, Korea from 6 – 8 November 2018.

During the inaugural ceremony, Mr Ko Sam-Seog Commissioner of Korea Communication Commission (KCC) gave the welcome speech, followed by opening speech of Mr Chang Jin, Director of AIBD, which was delivered by Mr Bae Jung Seob, Standing Commissioner of KCC and Special Advisory Officer of AIBD. and apply the learned techniques here. I am pretty excited to work on spreadsheet tables regarding the data of candidates, votes, results and many more", he added.

Another participant Ms Now Wahidah Muhammad, Strategic Communication Officer, Ministry of Domestic Trade and Consumer Affairs, Malaysia, said that the workshop was an "eye opening and lesson learning" for her as she learned various aspects and steps of data journalism though previously she used to produce infographics using the ministry's data-sets. The workshop ended with the presentation of certificates by Mr Chuah Hin Chiew, Head of Academic, IPPTAR, and Ms Philomena Gnanapragasam, Head of Programme Department, AIBD, together with a few words of thanks and remarks from two workshop participants, Ms Telma Theresa Pool, Principle of Radyo Sesel (SBC), Seychelles, and Mr Luqman Hakim Abd Malik, Head of Corporate Communication, Ministry of Domestic Trade and Public Consumers.



Seminar on Community Media Centres By Fathimath Leeza Programme Manager



Along with the high officials from the Korean media agencies, H.E. Mr Long Dimanche, and H.E. Mr Thura Thet Oo Maung, Ambassador of Myanmar graced the seminar. During their congratulatory speeches they both highlighted the importance of knowledge, citizen's right to information and how media can contribute to the betterment of humanity. The first day of the seminar focused on 'Community Media Centres' Promotion Policies' and 2 countries presented their case studies on the subject. Mr Lyou Wi-Hun, Chief of Busan Center, CMF, Korea, presented on the topic: 'A Case Study on the Activities of the Korean-type Community Media Centre' and Mr Abdul Rahman Ahmad, Deputy Editor-in-Chief,



Berita Malaysian National News Agency, Malaysia, presented on 'Media Centre Management'. The presentations were followed by question and answer session (Q & A), moderated by Mr. Jeong Gyu-Chan, President of Korean Association for Communication and Information Studies.

During the Q & A, the discussions focused on financing, quality of the content and authenticity of the sources as well as the grass-root activism, pluralistic democracy and social changes. Mr Shin Tae Sub explained during the Q & A session, the some of the main concerns of the media centres are to provide a platform for the localised content, which deals with the grass-root issues, space for minority groups, such as the Russian and Cambodians living in Korea, and inclusivity of disabled citizen. Mr Jeong further elaborated that the mainstream media focuses on the popular content which leads to the decline of cultural and localized content, hence these centres provide an important function for the Korean communities.

The first day concluded with a visit to the Haesong Middle School and Incheon Community Centre.

The second day of the seminar focused on 'The role of broadcasting and

cooperation plan for the right of viewers'. Mr Park Jae Hong, Executive Managing Director of Audience Relations, KBS and Mr. Kim Gwangjee, associate Professor of Hanyang Cyber University presented on 'The Role of Broadcasting for the Viewers' Rights' and 'Promoting Viewers Rights in Asia: A Cooperative Framework' respectively.

Mr Park highlighted the importance of having citizens involved with the decision making process of content creation in KBC through the means of an audience advisory council. Mr Kim Gwangjee stressed the points of media citizenship, where issues such as journalistic criticism, social irregularities and profit seeking practices, which damage the rights of the audience were addressed. He also presented the idea of having a transnational cooperation framework where AIBD could lead the project, which will have one country as the hub of such kind of cooperation. The session ended after the Q&A session which was moderated by Mr Kim Young Chan, President of Korean Association for Broadcasting & Telecommunication Studies.

After the sessions the delegates visited Gyeongbokgung Palace and National Folk Museum, followed by a tour of the KBS station.

The seminar was attended by 9 delegates from Brunei, Cambodia, Germany, India, Malaysia, Myanmar and Thailand.





Regional Workshop

DRM Digital Radio Implementation and Rollout

By **Utpal Kanti Mandal** Programme Manager, AIBD





The Digital Radio Mondiale (DRM) is a digital radio standard that has been designed by broadcasters and for broadcasters, with the active assistance and participation of both transmitter and receiver manufacturers and regulatory bodies. It has been designed specifically as a high quality digital replacement for analogue radio broadcasting in the AM and VHF bands.

The DRM Digital Radio Implementation and Rollout Workshop was jointly organised by the Asia-pacific Broadcasting Union(ABU), the Asia-Pacific Institute for Broadcasting Development (AIBD) and the Digital Radio Mondiale (DRM) Consortium. The workshop held on 26-27 November 2018 provided broadcasters, regulators, policy makers, governments and other stakeholders with a clear understanding of the DRM digital radio broadcasting services, its technology and features, planning methods. It was a first of its kind which was attended by many radio specialists from half a dozen Asian and African countries. The workshop introduced, demonstrated and discussed the benefits of DRM digital radio in meeting the diverse needs of countries wishing to offer full national coverage, regional and local flexible solutions with spectrum and energy savings in all bands (including VHF bands II and III) now.

DRM experts representing Fraunhofer IIS, RFmondial, the DRM Marketing Director, and the Honorary Chairman of the DRM India Chapter, struck a balance in their presentations between the theoretical aspects of the standard and the practical experience and lessons learned in many countries of the globe. DRM demonstrations on DRM receivers. hands-on sessions and the discussion of various scenarios kept participants fully engaged. The workshop also provided guidelines for step-by-step implementation, various solutions and strategies available for anyone deciding to move from analogue to a digital radio system rollout from planning to full-scale countrywide rollout. The speakers made it clear how to bring crystal clear sound and new content to the wider audience on all available radio broadcasting bands. This two-day workshop shared expert knowledge and up to date information on the

current status of digital terrestrial radio broadcasting, issues & challenges faced by the industry, as well as sharing some of the case studies and experiences in transition from analogue to digital radio from the region and beyond.



Mrs Ruxandra Obreja, DRM Consortium Chairperson, in her sessions provided a complete overview of DRM system. She detailed about the standard of DRM digital radio endorsed by ITU compared to other digital radio standards and ongoing FM radio services in different countries. She along with Mr Alexander Zinc of M/s Fraunhofer IIS explained DRM implementation steps for a successful DRM roll-out in both VHF and AM bands. Mr Alexander conducted a number of sessions and provided in depth knowledge about DRM features and its benefits. He also discussed network planning and transmission of DRM for the digital radio services.

As India is one of the biggest implementers of DRM digital radio in the country, Mr Yogendra Pal Hon. Chair DRM India Chapter, presented case studies from India. DRM can alert the widest possible audiences in case of pending disasters through its built-in Emergency Warning Feature (EWF), allowing to serve as a last resort when all local infrastructure is down by covering the affected area with radio signals from outside. Mr. Pal explained the Emergency Warning Functionality (EWF) feature so very important in DRM system. Other speakers were Mr Radu Obreja, DRM Marketing Director, who provided his views on DRM functionalities, DRM for large coverages,

the reality, successes and challenges in DRM receiving systems, and Dr Albert Waal of RFmonidial who demonstrated various types of receivers in the market and showed demo to the participants.

Ahmed Nadeem, ABU Technical Director, said the workshop was successful because it covered not only all areas of the technology and the DRM solution itself, but it also led to the understanding of the requirements and policy level decisions. What struck Mr Utpal Kanti Mandal, AIBD Programme Manager, as well as Ruxandra Obreja, DRM Consortium Chair, was the exceptional level of participation during the workshop with large number of questions and interactions.

The workshop, the first one in a series, was attended by 40 participants from nine countries. This workshop on Digital Radio Mondiale (DRM) was organised for the first time in partnership with DRM Consortium. The second edition will be organised tentatively in October 2019.



Regional Workshop



New Approaches to Impactful Gender Broadcast Programming By Syed Nabeel Timazi Programming By Syed Nabeel Timazi Programme Manager, AIBD

Gender has always been a prevalent topic in media for its consumers. Societies have always taken influence by how media portrays gender. Though media practitioners pose to be very active in advocating women's empowerment, yet many social scientists deny this claim and say media is not disseminating the gender challenges in its precise context.

According to experts, gender advocacy should not only be confined to inclusion or addressing social taboos but should also be focused on issues like objectification, gender stereotyping, limiting perceptions, mental health, androgynous approach, etc. With the transformation of media, there is a dire need to adopt new approaches to make impactful gender programming.

Agenda 2030 on Sustainable Development Goals (SDGs) focuses a lot on dealing with challenges like gender inequalities, exclusion, misrepresentations, etc. The success of these goals requires empowering each gender to be effective in every aspect of the society to create a better world for themselves. AIBD, being an active partner in highlighting SDGs in Asian-Pacific media development, designed a workshop to look at the latest trends in highlighting gender issues within the regional context and with the perspective of UN's policies.

AIBD organised a workshop from 11 to 15 December 2018 in Kuala Lumpur in a collaboration of Hoso-Bunka Foundation (HBF). HBF funded the workshop through a grant cycle for 2017/2018.

Ms Usha Bhasin, former Additional Deputy Director of Doordarshan, Dr Bina Akram Jabori, Assistant Professor, Khyber Medical University, Pakistan and Mr Nabeel Tirmazi, a former TV producer and documentary filmmaker from Pakistan, and current AIBD programme manager conducted the workshop.

Ms Usha Bhasin delivered sessions on the role of female broadcasters working in the media industry. She quoted many examples and case studies from India about impactful gender programming and showcased her renowned project 'Kalyani' which she produced in collaboration with the Indian Ministry of Health. Ms Bhasin also highlighted the role of participatory community media.

Dr Bina Akram Jabori highlighted the significance of understanding gender equity. She also discussed the gender portrayal and taboos in different cultures. Mr Nabeel Tirmazi highlighted SDG No.5 on gender equality. He also discussed various strategies to observe all 17 goals through gender lens. In other sessions, he discussed persuasive storytelling techniques and power of trans-media.

Participants also delivered their presentations about their respective country's gender programming. They also screened their own productions and presented their ideas on overcoming various gender challenges on media.

A video presentation by Dr Zobaida Jabu was also screened on portrayal of women in the advertising industry.

Regional Workshop



Digital Terrestrial Television Broadcasting Technology

By **Utpal Kanti Mandal** Programme Manager

The United States of America (USA) established its national standard for terrestrial broadcasts of high-definition digital television, known as ATSC (Advanced Television Systems Committee), in 1996. The European Union settled for its standard, Digital Video Broadcast-Terrestrial, or DVB-T, in 1997. Japan developed its Integrated Services Digital Broadcasting-Terrestrial (ISDB-T) standard in the 1980s and adopted it in 2003. But China finalised its digital television standard in late 2006, beginning transmission in 2008 during the Beijing Olympics. Being late in the standardisation of digital TV allowed China to take advantage of advances in information-



television in China work well even in adverse weather condition unlike that in the rest of the world.

The Regional workshop on Digital Terrestrial Television Technology was held in Kunming, Yunnan Province, China from 11 to 15 October 2018. The workshop was designed for the technical staff of television stations who are working in transmission division. The workshop was hosted by the Yunnan Broadcast Bureau of National Radio and Television Authority (NRTA). In this workshop, expert consultants who are involved in digital transmission implementation in China provided greater insights on DTMB systems. They also discussed the DVB-T/ T2, ATSC and ISDB systems to draw technical differences among the various standards of Digital TV.

The five-day workshop consisted of theory, practical and visits to studio and transmission site of the Yunnan Broadcast Bureau, Kunming, China.

On the first day of the workshop participants visited Yunnan broadcasting and control centre and overall view video-examination hall, among others, at Yunnan Radio & TV. They also saw the Yunnan application services platform for overseas promotion based on China terrestrial digital TV Transmission standard. The studio engineer explained their system as well as the operations of their HD and 4K studios. Mr. Song Jian, Professor, Department of Electronics Engineering, Tsinghua University, China, briefed participants about the technical trends of DTTB standards, technical differences, characteristics and global application and development of standards of DTMB, DVB-T. ATSC?ISDB. He talked about the TV Broadcast networks and different ITU standards adopted by different countries. He also highlighted the technical differences, characteristics and global application and development of standards of DTMB, DVB-T2, ATSC and ISDB,

On the second day, Mr Li Leilei, Senior Engineer of Academy of Broadcasting Planning, NRTA, focused on the practical operation of transmission system framework, transmitter structure and working. He talked about test and measuring instruments; Using spectrum analyzer to measure the bit error ratio and DVB-T/ T2 signal; Measuring crest factor and the amplitude, phase, group delay and impulse response; Measuring shoulder attenuation; Working principle of the receiver and methods of signal drive test. Another speaker was Mr. Li Mingrui of YNMDTV who explained the operation of different Instruments like front-end encoder, transmitter, multiplexer, Set-



Top-Box receiving end etc. Participants were very active in understanding the DTT chain through the demo set up. Then Mr Li Pingjiang, Senior Engineer of Radio, Film and Television Design & Research Institute, in his lecture session explained each step of the implementation of DTMB system and key points in each stage of DTT system construction.

On the third day, Mr Guo Jia, Senior Engineer NRTA, discussed the operation and maintenance issues of different measuring techniques of various modules such as front-end coder, multiplexer, set-top-box using instruments like field intensity indicator, road tester



spectrum analyser etc. He highlighted the working principle of receiver and methods of signal drive test. Mr Cai Xu, Senior Operation Expert, Tencent International Channel, talked on media convergence development tendency and impact of social media on broadcasting. He presented real life examples in the session that was highly interactive.

The fourth and fifth days were focused on site visits. Participants visited the terrestrial digital television construction project site of Yunnan Radio & TV station in Chuxiong. At the site the Chief Engineer explained about their systems. Participants got the opportunity to see multiple transmitters, transmitting from the same place. Participants also experienced the transmitter tower positioned at high altitude.

Twenty-eight delegates from Bangladesh, Cambodia, Laos, Malaysia, Nepal, Thailand and Sri Lanka participated in the workshop. They were invited by AIBD and NRTA. Mr Utpal Kanti Mandal, Programme Manager, AIBD, represented the Institute.



Media Convergence in China's Nutshell of Prosumers

By Lee Lai Mee Programme Manager, AIBD

Seventeen participants from 13 countries across the Asia Pacific region converged for a 12-day workshop in Beijing from 10 to 20 October 2018. In this AIBD / CGTNC Regional Workshop on Convergent Journalism, they were given deep insights into the emergence of media convergence; trends, experience and success stories of China in media convergence; and innovations for media tools and products for handling the challenges of media convergence.

The participants were reporters, journalists, editors, TV or radio producers, research officers, and heads of social media or news unit. They learned that no matter how great storytellers they have been and no matter how substantive and attractive their stories have been, the young people in their countries today are not listening to radio news, watching TV nor reading newspaper but rather they believe that social media is their main source of information. Their TV stations, public or private, and mainstream papers are facing hard times to keep their businesses going.

Faced with the challenges of the new convergent media on Big Data platform where contents are driven by Artificial Intelligence technology, these participants converged in this workshop which was mooted by AIBD and CGTNC to find answers.

Many renowned professors from the Communication University of China (CUC), Beijing were invited to the workshop to share their research findings on media convergence in what is called as China's nutshell of prosumers (producers + consumers = *prosumers*).

The lecturers comprised of Mr Shen Hao, Professor and Director, Big Data Mining and Social Computing Laboratory, CUC who spoke on 'Data Value and Visual Communication in the Era of Big Data'; Mr Cao Peixin, Professor, Faculty of Journalism and Communication, CUC for talked about ' Understanding China's Media Theory: History and the Present'; Mr. Cao Sanxing, Professor& Deputy Director, New Media Institute, CUC for discussed 'AI +VR + Blockchain, Innovation and Reformation of New Media in Broadcasting and TV', while Mr Ye Mingrui, Assoc. Professor & Master Supervisor, Faculty of Journalism & Communication, CUC focused on 'User Thinking and Media Product Transformation in Convergent Environment'; Mr Zeng Xiangmin, Professor & Doctoral Supervisor, Faculty of Journalism & Communication, CUC, spoke on'Content Innovation of Media Convergent' and Mr Fu Xiaoguang, Assoc. Professor & Master Supervisor, Television School, Faculty of Journalism & Communication, CUC on Content Production Logic under Internet Thinking'. Other speakers were Mr Ji Degiang, Assoc.

Professor of Communication, National Centre for Communication Innovation Studies, CUC who discussed 'Media Convergence with Chinese Characteristics' and Ms Liu Shan, Assoc .Professor, School of Information Engineering, CUC on 'Smart Labels Opens a New Era of Media Content Production'.

The Emergence of *Prosumers* in New Convergent Media

Amongst highlights of the workshop, was Assoc. Prof. Ye Mingrui, who gave an overall view of Chinese Media organisations transforming in a convergent environment. In his paper -The Transforming Media Audience: New Media? New Audience? - he said with the emergence of the new media, traditional media can no longer tell the audience/ consumer the stories or news the way they want them to believe. In the present China's new era, the role of audience/ consumer has changed the digital media. The audience/consumers control the way news or a story is to be told; they have become the prosumers.



He spoke of the need to revisit the features of media audience in current informational circumstance, analysing media users 'behaviour in the new media environment, understanding traditional media users and the newly emerged media users, and what kind of personal behaviour should be recognised as producers in today's information convergent environment.

Assoc. Prof. Fu Xiaoguang believed that understanding online behaviour from an active user perspective is the effective way to tell a story on internet. He said, "In the past, we just produce a report by locating a topic, prove the point and give a conclusion but today, we design online user behaviour and pose a challenge to attract everybody to participate. On the internet you produce consumer behaviour and consumers design the content. Audience has thus become prosumers."

Role of Big Data and Al in New Convergent Media

The participants learned that consumer behaviour is determined through the collection of Big Data which is analysed by Artificial Intelligence (AI) technology. According to Prof. Liu Shan, Big Data are structured data, digital satellite imaging, texts and scripts and are everywhere- in mobile handphone, computer, social media and network (FB, You Tube, Twitter, Flicker), website, purchase online, bank card, google site etc. Big Data capture and manage lots of information for use to analyse the content, profile people and product. Meanwhile Prof. Ji Deqiang, advocated the sharp decline of the direct usage of traditional media, the quick increase of using social media as gateway to a convergent / integrated media environment, and a consumption-driven transformation that pave the way for the media convergence in China and A Digital China Vision 2019. However, he said not a single media system model has grasped the dynamics of media development in contemporary China this far yet.

Prosumer – Influenced Content Production in New Convergent Media

The participants had a few enriching on - sites learning. At the All New Media (OMNI) Centre of CUC TV, they were shown how CUC students were taught the course of using AI for big data analysis of social behaviour and visualisation for prosumer-influenced content production in a convergent environment. All were mesmerised with the innovation. technology and studio facilities in CUC TV for the convergence of internet and mobile media; amongst which were the panorama, virtual and 4K high tech studio (built in 2016), the command and control centre for big data information and realtime news analysis and production with cloud computer system.

On-site Learnings

At the China Daily site visit, the participants were informed that after 37 years in the traditional print media, China Daily has to turn towards the new digitalised media in a convergent platform. Their Deputy Director shared



their challenges of how they had trained their conservative journalists to embrace new media to sustain business survival. All the participants seized every opportunity to learn and ask extensively in the classroom and on-site teaching.

Besides these on – site learnings, the participants were also taken to some arts and cultural visits in Beijing – Yangliuqing Cultural town and the 798 Art District to witness the transformation of the Chinese artistic and creative society in the era of Big Data and convergence environment towards A Digital China Vision 2019.

During the workshop closing, Mr Yike Qiao, Deputy Director of Strategic Investment Department, CGTNC, said that new media is just a technological platform while content is still the most important component in the past and for the era to come even though its *prosumer*-– influenced content production. He reminded all that media needs big data for easier mass understanding and Al cannot substitute human. There is indeed no denying convergent journalism is the dawn among those who are still the traditional media and soon to be the way forward in the era of Big Data and Al for all.





Regional Workshop



Engineering Fundamentals for Broadcasters By Utpal Kanti Mandal Programme Manager, AIBD

AIBD in collaboration with the Asia-Pacific Broadcasting Union (ABU) organised a fiveday regional workshop on Engineering Fundamentals for Broadcasters in Kuala Lumpur, Malaysia from 03 to 07 December 2018.

The workshop was designed for broadcast engineers and technologists who are at the beginning of their careers in the broadcasting organisations. Thirty-four participants from 14 AIBD and ABU member countries attended the workshop.

The workshop started with the brief introduction of the workshop and overview of the topics by Mr Utpal Kanti Mandal, AIBD Programme Manager, and Mr Ahmed Nadeem, Director of Technology & Innovation of ABU. Dr Mohieddin Moradi of IRIB, Iran took three sessions in succession and discussed the basics of sound and picture, understanding video capture, and processing as well as details about the audio processing, monitoring and measurement. He also took several other sessions in subsequent days wherein he discussed principles of media compression technologies and standards, evolving media and delivery platforms, converged media-IT broadcast landscape and others. He provided latest developments and advancements on evolving technologies like Artificial intelligence (AI), Machine Learning (ML), Augmented Reality (AR) and Virtual Reality(VR). Mr Shree Bhadra Wagle of ABU in his session talked about the broadcast path: from microphone and camera via console to the screen and speakers; systems for recording, modulation, transmission and reception chain.

Mr Ahmed Nadeem spoke about the evolution of audio and video, brief history of radio and television, audio and video



distribution system and fundamental of analogue and digital signals. He utilised a number of audio visual clips to help participants understand the basics of audio, camera, and microphones, among others. He discussed about repurposing of content, file formats and codecs, IP protocol and streaming methods. He also lectured on the components and applications of big data and opportunities and challenges for media due to increasing threat of cybercrimes.

Mr. Utpal Kanti Mandal discussed spectrum management and network planning for broadcasting services, providing the basics of spectrum management and frequency allocation for various services based on the ITU allocation. He talked about the International Telecommunication Union (ITU) and the National Spectrum Management Authority as well



as about network planning for television broadcasting. He explained radio wave propagation phenomenon in different layers of ionosphere, and the complex process of organising the World Radio Communication Conference (WRC) of ITU.

Mr Matt Ashe, Principal Engineer at Benchmark Broadcast Systems, in his session briefed participants about analogue transmission systems, MPEG standards overview, MPEG-2 transport stream structure, digital terrestrial transmission standards and systems, and digital modulation schemes. He also explained the Chinese standard DTMB while comparing with other standards like DVB-T/T2, ATSC etc.

Another speaker was Mr Bala Murali Subramaney of Astro Radio who talked about various elements of a radio studio, systematic approach in designing the studio and system design for the future. He also elaborated on radio studio console, radio studio automation system, central router, social media workflow and others. He also briefed participants about the radio studio construction including typical electricity requirement.

Mr Noel Teng, Technology Specialist, Microsoft, discussed the Azure Inspired Software Defined with windows server and Hyper-V Azure and Windows Server. In the latest Windows Server 2016 and more recently, Windows Server 1709 even





more Azure inspired Software Defined capabilities have been downloaded from Azure. Mr Noel shared the latest and greatest capabilities of Azure with demos and videos. His session was highly interactive, enabling participants to know more about the cloud service and raise questions on various related issues.

Mr Geoffrey Low of Dolby Laboratories in his session discussed Dolby Atmos: The next generation 3D audio experience. He explained the general aspects of 3D productions, setting up microphones for 3D, producing sports broadcasts in 3D and live music recordings in 3D, mixing immersive sound formats, content creation tools for immersive audio, up mixing from Stereo to 3D, monitoring immersive sound formats and also Dolby Atmos content creation process. He set up and positioned 5.1 surround sound system in the classroom and demonstrated the magic of surround sound to several participants one after another.

Participants also visited the radio and

television studios of Radio Television Malaysia (RTM) including their HD studio, Master Control Room, Satellite Earth Station set up.

The Engineers of RTM in respective areas briefed them about their systems. The participants were enthusiastic and were able to gather knowledge and information about RTM's technical facilities.

This was the fifth regional workshop designed specially to enhance capacity of newly employed engineers / technologists working in the broadcasting organisations. The 6th Regional workshop in this series will be held at Kuala Lumpur, Malaysia tentatively from 02 to 06 December 2019.





In-country Workshop

Making a Positive Difference to Reporting Climate Change

By **Anthony Frangi** Media Consultant, Brisbane, Australia





There are more stories published about the weather, ocean temperatures and melting sea ice than ever before, in addition to the political divide that's currently sweeping some countries. These topics alone could well be the reason why media audiences are switching off.

Desensitising viewers, listeners and readers is one of the greatest challenges faced by reporters today, ultimately leading to a feeling of hopelessness. Experts tell us that over the next few years, media organisations reporting on climate change will be faced with even more complex and disturbing data. While local media cannot ignore climate change, loyalty is a rarity these days with most people relying on more than one source to obtain their news, weather and information.

So how can local media communicate climate change more effectively, not only in times of disaster and emergencies, but in our day-to-day coverage, while at the same time building and retaining its audience?



We know that most people base their understanding of global warming on everyday experience of the weather, especially when it's extreme.

Some of the challenges general reporters around the world face when publishing stories on climate change include taking a scientific approach based on the latest data and relying on the usual sources such as politicians for comment. This can often lead to repetition. In the end, misreporting on climate change matters could be quickly misinterpreted by some as an attempt to deliberately mislead the community.

'Climate Change Reporting via Traditional and New Media' was the title of a three-day workshop for some 50 staff of TDM held at the IFT Campus in Macau, China from January 15 to 17, 2019. These participants ranged from managers, editors, journalists of Portuguese, English and Chinese television news, radio and television producers, specialist technicians, engineers, cameramen and controllers.

Workshop sessions included the role media plays when reporting on climate change and why it remains an essential part of getting the message out; the rise of social media and how to successfully engage with audiences; the challenges reporters face when covering climate change topics; how young people are approaching climate change and ways for the media to win them over, to finding the local perspective when reporting and how to effectively script your messages.

Included in the workshop were a series of guest presentations from some of Macau's leading organisations. On day one, Ms Kam Chit Soi, Superintendent of Police Affairs Liaison and Public Relations. Unitary Police Service addressed the work of Macau Civil Defence aimed at preventing serious accidents, public contingencies of hazards and disasters, as well as minimising injuries and loss once calamities strike. On day two, members of the Macau Psychology Association delivered insights into how reporters can best manage stress besides sharing stories of Typhoon Hato which struck the region in 2017, and the strategies for covering sometimes negative issues in ways that audiences can relate to. Day three welcomed Ms Maria Helena de Senna Fernandes, Coordinator of the Tourism Crisis Management Office, to discuss Macau's emergency response tactics following natural or manmade disasters and how local media can support them.

On the final day, participants gave a three to five minutes' presentation on creative programming initiatives for addressing climate change via traditional and new media. In-country Workshop

Creative Content Development - The How Factor By Jack Nadarajah Freelance Media Consultant, Kuala Lumpur



A four-day RTB/AIBD In-Country workshop on Creative Content Development (CCD), which focuses on the big "HOW", was successfully concluded in Bandar Seri Begawan of Brunei Darussalam. Jointly organised by Radio Television Brunei (RTB), Darussalam Enterprise (DARe) and AIBD, the workshop was held from 17th – 20th September, 2018.

It was aimed at encouraging creative individuals to explore and develop ideas produce television programmes, to

films, short videos that are commercially viable, marketable and saleable for both domestic and international markets. The CCD workshop also acted as a main platform for participants to share knowledge, skills and best practices by industry players in producing content for their target audiences.

The workshop was a follow-up from the two-days' RTB/AIBD In-Country seminar on Creative Media (Production Beyond Brunei) held on August 1st & 2nd, 2017.



The aim of that seminar was focused on creating awareness on the growth of creative media industries in Brunei Darussalam as well as understanding the trends of TV programmes, films, and short videos regionally and internationally. Meanwhile, Darussalam Enterprise (DARe) as the collaborative partner, launched the Industry Business Academy (IBA) in July 2016 as an integral component of its developmental programme to provide Micro, Small and Medium Enterprises (MSMEs) with the knowledge they needed to start, grow and export their products.

The recently concluded workshop was conducted by a seasoned Malaysian television producer, Mr Jack Nadarajah who has had over 30 years of experience in the production of entertainment programmes. Mr Jack also served as RTM's Strategic Director till his retirement in 2017.

Successful television/film production requires an extensive (pre-production, production, post-production) planning and execution. The participants were exposed to various methods and approach-



es in creation of new ideas for content productions. Emphasis was also placed on research and demography to ensure that the content creation was really needed and to ascertain the age, background and abilities of those at whom it was targeted.

The participants were made to understand and always remember that knowing the audience is of utmost importance and crucial for success while not understanding has led to the basic of many failures. Understanding audience needs is the key factor in developing content for television.

Besides new content creation or expansion of the existing content, participants were exposed to the idea of commercial strategy; a plan for building an audience by broadcasting, maintaining, and publicising consistently effective contents that inform, educate, entertain, or inspire to turn strangers into fans and fans into customers. RTB Director Haji Muhammad Suffian Bin Haji Bungsu presented certificates to the 34 participants at the closing ceremony of the workshop held at the Design and Technology Building in Anggerek Desa, Brunei.

Participants were mostly local and freelance producers, and creative individuals. Indeed, it was a very appropriate and interesting workshop and I was happy to train this group of creative producers here in Bandar Sri Begawan.

In-country Workshop

Modern Broadcast Management for RTB's Young Executives

By Munira Murad

Independent Consultant, Malaysia



The AIBD in collaboration with Radio Television Brunei (RTB) successfully organised a four-day workshop on 'Modern Broadcast Management for Young Executives of RTB' from 24 Sept to 27 Sept 2018. This workshop was intended to help improve the performance of young executives of RTB with knowledge on leadership and management styles, their interpersonal communication, planning, prioritisation and problem solving skills. The training workshop was held at the Training Centre of RTB, Madang, Brunei.

To ensure a productive workshop, a brief pre-test was conducted to find out participants' existing knowledge of the subject matter and their expectations of the workshop. It was observed that most of them responded to issues on people management.

Participants were divided into five groups to facilitate learning. Each group discussed and presented their current practices as managers and their major roles and responsibilities as well as issues they faced while performing their duties as managers. The trainers and the participants shared their views and experiences about the topics discussed. Common job scope as managers, issues and multiple suggestions were identified and put on board to comprehend the complexity of management and leadership concept and approach. As the ability to lead is an important skill that participants should have in order to maximise efficiency and to achieve organisational goals participants were then introduced to the Five Levels of Leadership by John Maxwell. Hence, the workshop focused on leadership development that will help young executives at RTB to develop a productive, professional approach to people management.

Trainers used several facilitation techniques, including question and answer, leadership games, brainstorming, group discussions, case study discussions and practical implementation of some of the topics by trainees on flip charts and paper sheets. These training methodologies were used to ensure all the participants understand relevant concepts and practice what they learn.





overall course evaluation which was more comprehensive than the daily feedback collected from the participants. This evaluation was intended to obtain participants' views about different aspects of the training – from the venue to the effectiveness and coverage of the topics, and from the trainer's knowledge and preparedness to their overall impression of the whole experience.

It was suggested that the work of the delegates be monitored by their managers for any improvements and there should be specific follow-up by their managers regarding what their subordinates have learnt from the training and how they are going to implement it in their actual daily activities. The commitment, concentration and accountability shown by the participants were one of the reasons for the success of the workshop.

Majority of the course participants took active part in the workshop, communicating and expressing their thoughts on the subject matter. There were few participants who did not actively get involved in class discussion but chose to speak out on a personal trainer-trainee conversation. As an overall observation, course participants accepted open discussions more so during the absence of course coordinators. Course participants showed





Arhievements DIG - Penghijrahan dari ANALOG Rebranding /alues: Menualurkan maklumat - Media kerajaan Future Planning: Privatisation/ Semi. Subscription (Video on Demand 1/promote Brune; o the Internet Cour community 2/ Premier and Dynamic GOLD/FUTURE Media Organizatio ALUE -/blast off towards the star to achieve goals 2/ moving Fast 31 powerful 41 optimist 50 C)6 ACHIEVEMENT 1/Innovation 2/ Initiative WINGS

relatively high satisfaction in the course module when they realised the importance of leadership in effective management. It is suggested that the work of the course participants be monitored by the administrator for any improvements and there should be a follow-up by the administrator regarding what their subordinates have learnt from the workshop and how they are going to implement it in their actual daily activities.

Participants received certificates of completion during the workshop's closing ceremony.

(Ms Munira Murad, Independent Consultant with AIBD served as the workshop trainer. With more than 25 years of experience in broadcasting and having managerial posts in various division in Radio Television Malaysia she also held key responsibilities in the transformation of Tun Abdul Razak Institute for Broadcasting and Information Malaysia (IPPTAR) as a centre of excellence in broadcast training.)

In-country Workshop

Emerging Technologies for Broadcasting and Media; Production to Delivery By Dr. Amal Punchihewa Broadcast and ICT Consultant/Trainer



Broadcasting Corporation-Mauritius MBC is the public broadcaster in Mauritius entrusted with serving nearly four hundred households. Mauritius is one of the countries in the African region to make transition from analogue television to digital quite early. As an early adopter, MBC lives in legacy format of Standard Definition (SD), with no elaborate Electronic Programme Guide (EPG), compressed on MPEG-2 to deliver over DVB-T digital terrestrial network. Over nearly last 13 years, MBC has been planning various technology transitions. Among them is standard spatial resolution to High Definition (HD) (commonly known as SD to HD), EPG, over-the-top (OTT) content delivery and HD outside broadcast vehicles.

The Asia-Pacific Institute for Broadcasting Development (AIBD) and Mauritius Broadcasting Corporation (MBC) jointly conducted an in-country training and workshop facilitated by the broadcast and ICT consultant and trainer Dr AMAL Punchihewa from 15th to 19th October 2018 at MBC, Mauritius. The theme of the training and workshop was "Emerging Technologies for Broadcasting and Media; Production to Delivery".



During five days, senior engineers and technical staff participated in studying more than ten topic areas and twenty technologies that are driving the broadcast and media industry. Twenty staff who received in-depth training appreciated the AIBD.

Having refreshed basic concepts and fundamentals in data acquisition, compression, networking, distribution and delivery, emerging technologies were described in details to emphasise their influence on broadcast and media industry. Among them, compression technologies from MPEG-2, AVC, HEVC to VVC, improving acquisition mechanisms in SD, HD and UHD, Standard Dynamic Range (SDR) to High Dynamic Range (HDR), High Frame Rate (HFR) and Wide Colour Gamut (WCG). Due consideration was given to cost of each technology against benefits they could offer during discussions. Open codecs such as AV1 was discussed compared to HEVC or VVC that has complex royalty schemes, better support network and improved performance.

The group was presented with various scenarios and case studies. They were engaged in discussions to explore their ideas and views in the context of Mauri-tius broadcast and media market.

Mauritius is a geographically small country but rugged terrain presents enormous challenges in terrestrial delivery and network planning. Currently television contents in standard definition (SD) are de-





livered via DVB first generation terrestrial network set-up in 2005. Head-end uses legacy compression standard MPEG-2 without statistical multiplexing. Delivery is done by the network provider MCML, a public company of Mauritius. MCML is planning to upgrade its network to second generation terrestrial DVB technology (DVB-T2) using possibly HEVC encoders. This enables MBC and other broadcasters to offer multiple high definition (HD) video content that lead to extra capacity offered by high efficient video compression from HEVC and DVB-T2 channel coding. Network has 26 transmitter stations that are connected via digital microwave backbone. They all operate as transmitters. It is anticipated that DVB-T2 network will be a multi frequency network (MFN).

One of the critical questions that MBC has to face is the choice of interconnections for broadcast equipment in its new HD production facility. MBC, like any other public broadcaster has to operate with limited funding. As SMPTE 2110 standards were finalised late 2017, MBC is concerned about initially high marginal cost difference between IP interfaced infrastructure and SDI based systems. During the workshop and training, virtualisations, orchestration and software defined networks were discussed. Then it was explained to the participants how those technologies would change the way broadcast facilities are built and operated. Future broadcast stations are data centres interconnected to intra-networks and outside world via network devices such as routers using optical fibre physical medium.

MBC next transition aims to integrate a number of technology transitions to take full advantage of its investment. Globally it is recognised HbbTV or any other Integrated Broadcast-Broadband (IBB) will serve future broadcasting for a foreseeable future. Hence, HbbTV as an Integrated Broadcast-Broadband system was discussed extensively. Discussions included the services that HbbTV could offer, infrastructure that is required and importance of planning and introducing HbbTV set-top box and EPG in conjunction with DVB-T2 network roll out. HbbTV has been adopted by many progressive broadcasters having DTT or DTH all over the world. As Integrated Broadcast-Broadband (IBB) systems seamlessly marry both broadcast and broadband services providing high quality, flexible, interactive, discovery, companion device, synchronisation and personalised services broadcasters can create competitive edge against its competitors. As state of the art, broadcast provides efficient and cost effective delivery of high quality media content to a broader viewer base simultaneously. Broadband enables flexible and personalised on demand services. HbbTV also supports services not linked to digital terrestrial broadcasting but also satellite direct to home (DTH) with catch up, premium content and other on demand and over-the-top (OTT) services.

The training and workshop not only explored emerging technologies but also examined other value added services and business opportunities that they could introduce to gain a competitive edge in the market place. Participants focused on advancements in technological aspects and its impact on business having discussed basic principles, techniques and broadcasting trends. Case studies from Asia-Pacific region and European region were presented highlighting similarities and differentiations.

Among other topics trainees were exposed to IP based media production, receive devices, catch up VOD services, immersive audio and video, online media distribution, cyber security, multi-CDN and artificial intelligence and machine learning in broadcasting. Over the five days, discussions covered a variety of technologies, infrastructures and services connected with modern broadcast station.

CDN and Multi-CDNs for media operations were discussed. Trainees were introduced to multi-CDN architectures and systems that could enhance media delivery over the Internet. Multi-CDN solution used by EBU members known as EBUflow, currently marketed by Eurovision as Eurovision-flow, was explained with improved performance and cost benefits. It was also discussed how to improve the user interface (UI) which is an important aspect of better user experience (UX) including speech interfaces.

Trainees visited IPTV facility of Mauritius Telco and Digital Terrestrial Television network hub of MCML to get first-hand experience how network operation centres operate and building blocks of those systems.

Both MBC and trainer expressed their special gratitude to AIBD enabling such valuable human capacity building event in Mauritius for MBC.



New Appointments

ABD New Appointments New Leaders

Mr Abdul Muis Shefii is the New RTM Director General



The newly-appointed Director General of Radio Television Malaysia (RTM), Mr Abdul Muis Shefii, is no stranger to broadcasting, journalism and news management.

Within the RTM organisation, his service of more than 35 years included appointments at several divisions, beginning as a journalist cum news editor in 1983 to managing several units

in the news department, including a stint as the State Director of Broadcasting in his home state Terengganu.

In August 2017, he was appointed Deputy Director General of Strategic Broadcasting and in January 2019 Director General of RTM.

Mr Muis holds a master's degree in corporate communication. His forte has been in news and current affairs. He attended international fellowship programmes at Wolfson College in Cambridge, United Kingdom and at CNN Atlanta in Georgia, United States of America. A prolific scholar, he presented several papers at various international conferences on journalism, politics and disaster management.

The new RTM head was Chairman of the Asia-Pacific Broadcasting Union's News Group, and a member of other institutions like BERNAMA, ISWAMI and Malaysian Press Institute. He lectures at local universities and agencies on journalism and is a lifetime member of Chevening Scholars Alumni and Universiti Putra Malaysia (UPM) Alumni.

Mr Arshad Khan returns to Pakistan's State-run Television



Pakistan's Federal Government has appointed Arshad Khan as Managing Director of Pakistan Television's Board of Governors. Information Minister Fawad Chaudhry announced the appointment after a meeting of the Federal cabinet in Islamabad.

Mr Arshad who has brought with him vast experience of the telecom sector

will replace Atta-ul-Haq Qasmi. He previously served as Managing Director of Pakistan Television in 2004. He also served as the Chief Executive Officer of Ufone.

The new Managing Director of state-run television is a telecom

engineer with a Master's degree from USA and business diploma from UK.

Meanwhile, television channels reported that the Director General of Inter-Services Public Relations (ISPR), Maj. Gen Asif Ghafoor has been appointed to the PTV's Board of Governors. The new PTI government announced to give the state-run PTV and Radio Pakistan complete editorial freedom.

NEW APPOINTMENT IN SODEC-NEPAL

Ms Chandra Kumari Rimal Chair, SODEC-Nepal

The 9th Annual General Meeting of Development Communication Society Nepal (SODEC-Nepal) held in Kathmandu in November 2018 has elected a new executive committee under the chairmanship of Chandra Kumari Rimal for the next two years. Ms Rimal who is a



founding member of SODEC-Nepal was General Secretary in the earlier executive committee. The AGM has appointed Prof. Lal Deusa Rai, the immediate past chair, and Dr. Pius Raj Mishra, the former chair of the organisation, as Senior Advisors. Mr Rai is a pioneer media and communication academic while Dr Mishra is a pioneer development communication expert of Nepal.

Mr Om Prakash Ghimire ED, SODEC-Nepal

Likewise, the executive committee has appointed Mr. Om Prakash Ghimire as Executive Director. Mr. Ghimire who is a working journalist, media researcher and media academic is the founding member of SODEC-Nepal. SODEC-Nepal has been working in development



communication and journalism sectors as one of the leading organisations especially in knowledge production, advocacy and capacity building.

The organisation was founded by a group of mass communication professionals in 2010. Its goals are to exercise the influence of communication and media for better access to information, education, and knowledge, and act as a stimulant for development. The premise for SODEC-Nepal's involvement in development communication is based on the concept of multiplicity, democratisation, and participation at all levels by stressing the cultural and political identities of the local communities.

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