

AIBD perspective of Digital Terrestrial Broadcasting: Audio, TV

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Outline

- What is AIBD?
- Broadcasting?
- Digital Radio and Television
- Digital Terrestrial Broadcasting – Audio and TV
- How can we mitigate divide in Terrestrial Broadcasting
- Challenges in our region - APAC
- Points for discussion

What is AIBD?

The Asia-Pacific Institute for Broadcasting Development (AIBD) was established in August 1977 under the auspices of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

It is a unique regional inter-governmental organisation, servicing countries of the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP) in the field of electronic media development.

Broadcasting

ITU-R definition

- RR 1.38 broadcasting service: A radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmission.
 - Radio Regulations (RR) of ITU
- Universal access - Right to access, Accessibility, inclusiveness
- No gatekeepers, available, affordable, sustainable



Digital Radio and Television

- Various international standards
- Standardised by ITU, ETSI, and various international, regional and national bodies
- Greater harmonisation
- In audio, can find details in [WBU DRG report published in April 2019](#)
- TV – Terrestrial first and second generations
 - TV – Terrestrial first generations ATSC1.0, DVB-T, ISDB, DTMB,
 - TV – Terrestrial second generations ATSC3.0, DVB-T2, DTMB 2.0

Digital Terrestrial Broadcasting

- Analogue vs Digital
- Analogue used to have coverage over 90% free-to-access
- Digital penetration is low
- Digital audio (broadcasting) - Australia has digital sound broadcasting
- Digital TV – only about 10% done ASO
- Distribution mechanisms - Over-the-air (OTA) and over-the-broadband (OTB)
- Multiple distribution mechanisms (Over-the-air) – Terrestrial, Satellite and IP based
- ITU and Broadband Commission reports reveal less than 50% can access
- Congested broadband networks during COVID-19 because BB is Not scalable

How can we mitigate divide in Terrestrial Broadcasting

Current status

- APAC - 40 countries
- ASO - 9 countries
- Thirty-one (31) more countries are yet to switch off analogue television broadcasting services
- Heterogeneous – Technologically, economically, socially,

How to mitigate?

- Innovate and sustain systems
- Make sure scalable, available, affordable, accessible (no gatekeepers), no interference to incumbent services

Challenges in our region - APAC

- Poor digital terrestrial services for Audio and TV broadcasting in APAC
- Mobile over the air technologies are not yet ready to deploy – Need not to repeat cases such as MediaFLO, ISDB-Tsb, DVB-H, ISDB-Tmm, etc.
- APAC does not have spectrum like in ITU region-2 to operate broadcasting as a private MNO
- To assure terrestrial broadcasting for Audio and TV require complete ecosystem including not only distribution, but also devices for consumption at affordable price and without gatekeeper.

Points for discussion

- Having seen and noted what & how DTT and ATV served during pandemic,
- How can we sustain Terrestrial Broadcasting services, especially as Digital
- How can we design our systems to sustainable and low emissions (climate friendly, green technologies)