

ITU-R Study Group 6

Andy Quested
Chair ITU-R Working Party 6C

Access to media is a right...

...not an inconvenience

ITU Resolutions

Resolution 58 (Hyderabad, 2010) & Resolution 70 (Dubai, 2012)

- *recognising...*
 - ongoing work in the ITU Radiocommunication Sector to bridge the digital disability divide

Resolution 67 (Geneva 2015)

- *resolves to invite ITU-R...*
 - to continue conducting studies, research, guidelines and recommendations, related to telecommunication/ICT accessibility for persons with disabilities and persons with specific needs, and in close cooperation with ITU-T & ITU-D

ITU Resolutions

Resolution 67 (Geneva 2015)

- *instructs the Director of the Radiocommunication Bureau...*
 - to cooperate with the Directors of the Telecommunication Development Bureau and the Telecommunication Standardization Bureau in the sustainable development of devices and applications promoting compatibility of the new technologies with the current ones to benefit telecommunication/ICTs for persons with disabilities and persons with specific needs;
 - *to encourage and promote representation by persons with disabilities and persons with specific needs so as to ensure that their experiences, views and opinions are taken into account when developing and progressing ITU-R work.*

ITU Resolutions

Resolution 175 (Dubai 2018)

- *recalling...*
 - the Intersector Rapporteur Group on audio-visual media accessibility (IRG AVA), between the ITU Radiocommunication Sector (ITU-R) and ITU-T, is working on broadcasting and Internet television in order to include audio description for the visually impaired and captioning/subtitles for persons who are deaf or hard of hearing, as well as to include other persons with disabilities and persons with specific needs in accessing remote Internet participation.

ITU-R Study Group 6

Hard facts

- About 15% of the World's population have difficulties when accessing telecommunication services including broadcast media
- 16% of European adults have health related problems that make the consumption of broadcast media difficult or impossible
- Age related *hearing, vision and mobility* issues are affecting an increasing percentage of the population, an increasing number of people have hearing and/or viewing problems as well as reductions in mobility that make the control of apparatuses difficult

ITU-R Study Group 6

New Question

- Four key areas
 - Fundamental layer
 - Enhancement layer
 - Interaction layer
 - Enablers

ITU-R Study Group 6

Fundamental layer

- What systems can be used for delivering sub-titling/closed captioning, and systems to deliver audio into text, appropriate to the delivery of broadcast media and related services.
- What systems can be used for delivering signing/closed signing appropriate to the delivery of broadcast media and related services?
- What systems can be used for delivering audio description/described video for video content appropriate to the delivery of broadcast media and related services?

ITU-R Study Group 6

Enhancement layer

- What systems can be used for delivering ‘clean audio’ (facility to improve the clarity of foreground sound) for the delivery of audio for broadcast media, and related services?
- What technologies could be used to enhance the *understanding* of broadcast media content for persons of differing abilities?

ITU-R Study Group 6

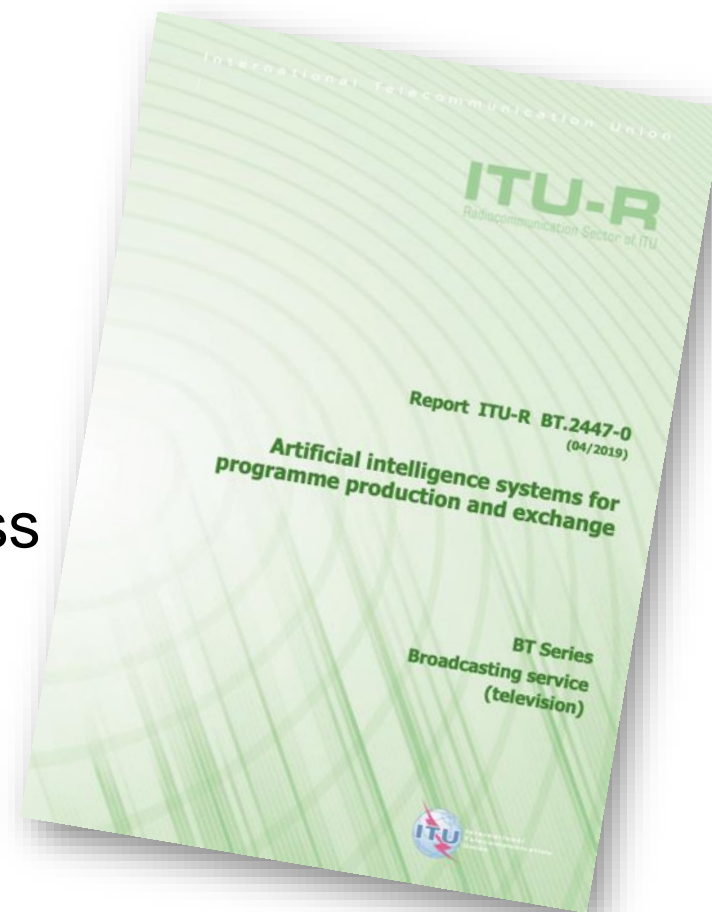
Interaction layer

- What systems can be used for delivering haptic information appropriate to the delivery of broadcast media, and related services?
- What are the preferred ways that can allow a person with different ranges of ability (vision, hearing, motor impairment) to take part in interactive programme content?

ITU-R Study Group 6

Enablers

- What use of intelligent agents and related technologies could assist in the development and application of access systems and services?
- Report ITU-R BT.2447 (May 2019)
 - Automation of content recognition
 - Speech to text and text to speech
 - Dialogue tools for Audio Description
 - Translation – eliminating then unintended – such as... **“this sauce is like crack.”!!**
 - Object and Scene recognition



ITU-R Study Group 6

Current Work

- Reports

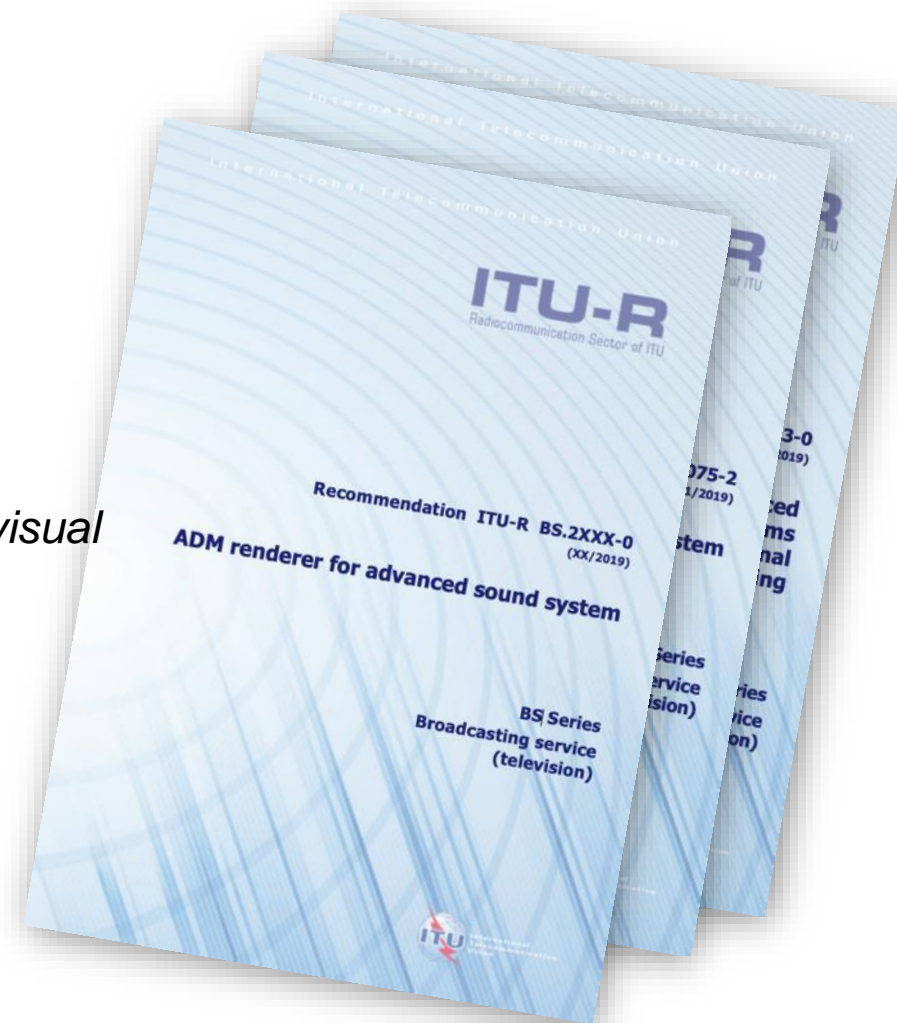
- **ITU-R BT.2448** *Technical Realisation of signing in digital television*
- **ITU-R BT.2420** *Use cases of advanced immersive audio-visual systems*
- **ITU-R BT.2400** *Usage scenarios, requirements, and technical elements of a global platform*
- **ITU-R BT.2342** *Production, emission and exchange of closed captions for all worldwide language character sets*
- **ITU-R BT.2267** *Integrated broadcast-broadband systems*
- **ITU-R BT.2207** *Accessibility to broadcasting services for persons with disabilities*



ITU-R Study Group 6

Adaptation

- Recommendations
 - ITU-R BT.2123 *Video Parameters for advanced immersive audio-visual systems*
 - ITU-R BT.2075 *Integrated broadcast-broadband systems*
 - ITU-R BT.2XXX *ADM Renderer for advanced sound systems*



ITU-R Study Group 6

Working Party 6C

- all content should and must be accessible
 - to create a Sub Working Group dedicated to Accessibility – across all areas of study
 - to encourage contributions
 - to employ as much of the technology developed to enable participation
 - to input to and assess all new documents
 - to participate across the ITU sectors (IRG AVA)
 - to enable understanding of cultural and demographics related to accessibility
 - to fulfil the goals of the UN Convention on the Rights of Persons with Disabilities

Thank you

*Andy Quested
Chair ITU-R Working Party 6C*