

Future spectrum challenges for terrestrial television broadcasting in Europe

David Hemingway
BBC Distribution & Business Development

Agenda Item 1.5

- UHF Spectrum used for
 - DTT broadcasting
 - PMSE (audio links: radio microphones, talk-back etc)
- Not all Public Service Media use DTT
- But all use the spectrum for production
- DTT is evolving towards new technologies (DVB-T → DVB-T2 → "5G Broadcast")
 - Different countries/broadcasters evolving at different paces
- PMSE evolution towards 5G not certain

ITU-R WP 6A – Preparatory Work

- The Conference Preparatory Meeting CPM23-1 decided that:
 - The Responsible Group for Al 1.5 would be a Task Group of SG 6 (TG6/1)
 - Contributing groups would provide:
 - Spectrum use and needs for the services in 470-960 MHz;
 - The assumptions for [sharing and compatibility] studies ... (including system parameters and propagation models) and the technical characteristics including protection criteria
- The contributing groups provided this information to TG6/1 by 15 May 2021

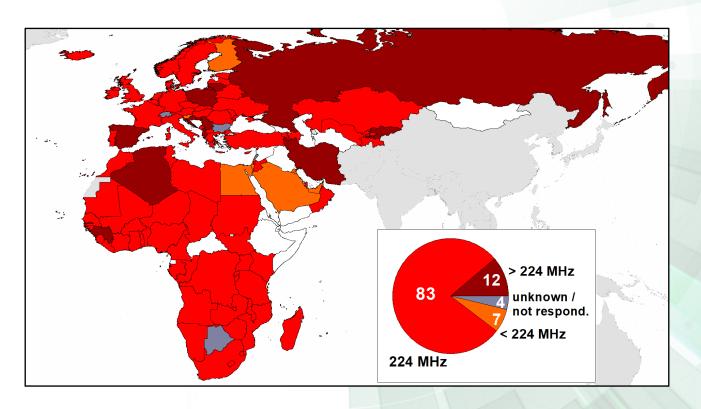


Spectrum use and needs

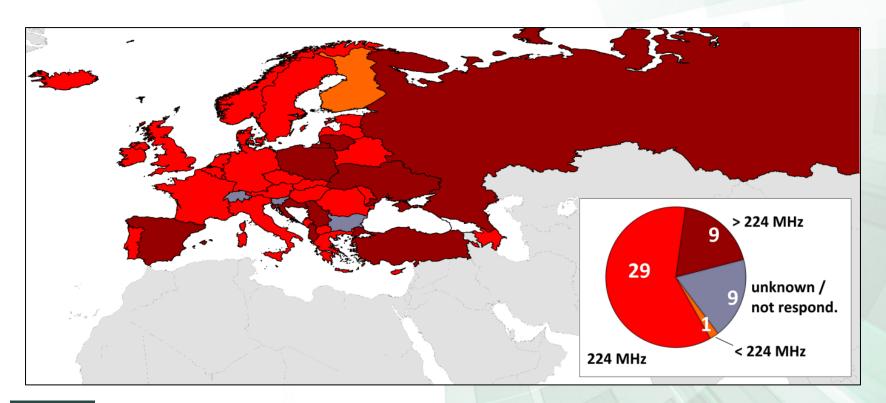
- Working Party 6A studied the spectrum use and needs of the Broadcasting Service in Region 1 in the band 470-960 MHz by means of:
 - A Questionnaire (6/LCCE/104) send to all Region 1 administrations plus Iran on the current use of the band and expected future use of the band
 - An update to Report ITU-R BT.2302 "Spectrum requirements for terrestrial television broadcasting in the UHF frequency band in Region 1 and the Islamic Republic of Iran", including the analysis of the questionnaire results



Spectrum Use and Needs

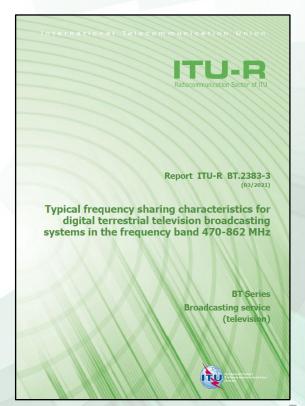


Spectrum Use and Needs



Technical Parameters

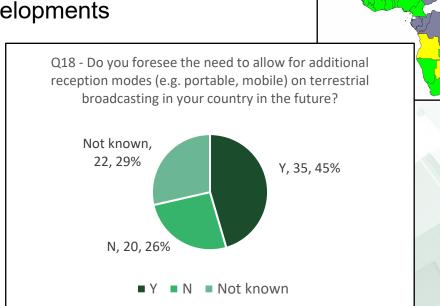
- The technical parameters of the Broadcasting Service required for sharing and compatibility studies under Al 1.5 are found in:
 - ITU-R Report BT.2383 "Typical frequency sharing characteristics for digital terrestrial television broadcasting systems in the frequency band 470-862 MHz"

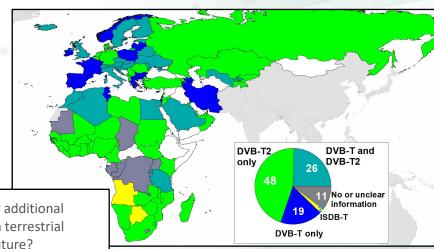




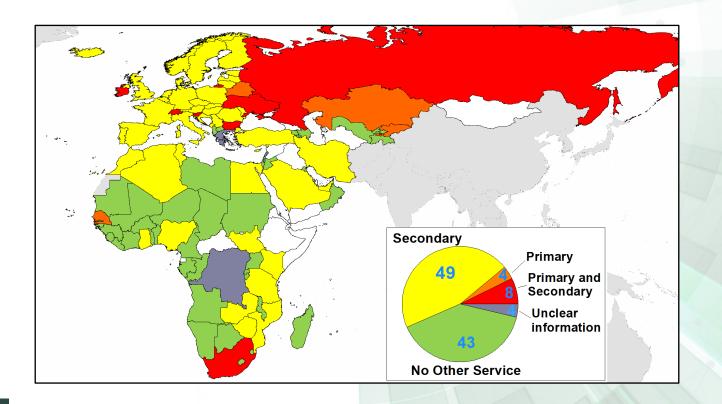
Technological Developments in Broadcasting

- Many countries are now using DVB-T2; others are still migrating from DVB-T
- In some countries, there is interesting in new broadcasting transmission standards and further developments





Other uses of the UHF Band





Thank you!

david.hemingway@bbc.co.uk

