BBC TECHNOLOGY & MEDIA OPERATIONS

Global Perspectives on Spectrum Sharing

Broadcasters and PMSE

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1ST NOVEMBER 2024

'The BBC must secure the efficient use of the radio spectrum that is available for use by the BBC or its contractors' BBC Charter

Use of Spectrum - Broadcasting

- Terrestrial and Satellite 148.5kHz to ~30GHz
  PRIMARY

‘Chaos in the ether’ led to effective worldwide regulation to this day

Co-ordination and Sharing through Government supported Regulators

Use of Spectrum – Programme Making and Special Events

- PMSE Bands (UK) 48MHz to 48GHz
- Virtually all ranges are

SECONDARY i.e. Shared

- Key ranges
  470-694, 960-1164(UK), 2010-2110, 2200-2300MHz….

Co-ordination and Sharing through Government supported Regulators?

Issues with the PMSE Sector and its spectrum requirements

- The PMSE industry is relatively small with little influence to counter other larger radio sectors
- PMSE uses mass market technologies and COTS equipment and spectrum e.g. DECT and 5G when it can……but
- Bespoke requirements remain

  Ultra-low latency applications (audio)

  Frequency bands with good propagation, antenna size and low power consumption for portable use

  Short notice access to sufficient suitable spectrum anywhere

Barriers to PMSE Sharing Spectrum

- Not all Regulators have a complete and common understanding of these PMSE requirements
- There is little appreciation of the Economic and Cultural Value of PMSE spectrum which is hard to quantify
- International efforts to promote PMSE spectrum therefore lack a common focus

A way forward for PMSE Sharing?

- Broadcasting has successfully maintained and co-ordinated its spectrum through a common international understanding of its value

- Distribution of broadcasting content relies less on its own spectrum as time goes on, moving to streaming, content delivery over telco networks…..

- Time to consider Content Production and PMSE Spectrum as more than SECONDARY use to enhance its sharing?

Thank you