

EUTC Response (Non-Confidential)

Letter to UK Licence Holders of Fixed Links in the 1.4 GHz Band

To: Mr Alex Dixon: 1.4 GHz Revocation, Ofcom, 2a Southwark Bridge Road, London SE19HA By email to 1.4GHzRevocation@ofcom.org.uk

EUTC Members {*Names Redacted for non-confidential version*} have received notice that Ofcom intends to revoke fixed links licences in the 1.4 GHz band on 31 December 2022 and have been invited to make representations to Ofcom.

Justification for this action has been placed on European Commission Decision 2018/661.

We find this reliance on the European Decision surprising as through our membership, we are aware that utilities in other European countries (Spain, Ireland, France, Portugal and Slovenia) also use fixed links in the 1.4 GHz band, and similar action to vacate the whole band has not been undertaken in those countries. Where action has been taken to re-farm the spectrum in 1427-1517 MHz for supplementary downlinks and utilities have made out a case for continued use, the flexibility for national variability in the EC Decision has been taken to allow utilities continued use of the band, reflecting their strategic importance to the economy and social implications of premature refarming of the band when the commercial benefits of SDL in 1500 MHz spectrum are unproven.

On behalf of our UK members, EUTC requests that Ofcom reconsiders its decision and takes advantage of the flexibility built into the EC Decision to allow utilities to continue to use a portion of the 1.4 GHz band for fixed links for as long as national circumstances justify this situation. If license revocation is deemed unavoidable then an extension for vacating the band should be considered along with financial contribution for implementing any alternative solutions (as is the case for the PMSE sector as part of the 700 MHz band clearance).

Background

Operational communication capability is increasingly important for utilities driven by the demands of Smart Grid developments. To enable Smart Grid developments, more and more European utilities are pursuing access to spectrum to complement fixed telecommunications networks. Dedicated wireless communication systems enable a range of critical communications within the Grid's operation requirements, improving connectivity to all assets and allowing energy utilities to exert a level of control over their network assets that can be guaranteed and is both robust and resilient. In addition, critical utility operational networks must incorporate cyber-security measures capable of withstanding sustained attacks from hostile nation-states. EUTC's response has been to draw up a spectrum proposal highlighting utility needs for access to a range of frequency bands reflecting the unique properties of different parts of the radio spectrum. This is illustrated in the attached diagram which includes spectrum in the 1500 MHz L-band region. There are currently over 250 operational 1.4 GHz links within the UK utility sector.



Traditionally, electricity networks have been one-way systems to deliver power from large centralised generation sources into a transmission grid at high voltage, and then distributed to customers at low voltage.

The current challenge is to accommodate large numbers of intermittent sources of renewable generation connected into the distribution networks at their extremities where the power infrastructure is at its weakest; whilst at the same time reducing 'customer minutes lost' by increasing the reliability of the network.

EUTC Spectrum Proposal

Within Europe, multiple small allocations within harmonised bands:

LESS INTENSE APPLICATIONS

 VHF spectrum (50-200 MHz) for resilient voice comms & distribution automation for rural and remote areas. [2 x 1 MHz]

ANCHOR BAND

 UHF spectrum (400 MHz bands) for SCADA, automation, smart grids and smart meters. [2 x 3 MHz]

MORE DENSE APPLICATIONS

- Lightly regulated or licence-exempt shared spectrum for smart meters and mesh networks. (870-876 MHz)
- L-band region (1500 MHz) for more data intensive smart grid, security and point-to-multipoint applications. [10 MHz]

FOUNDATION BANDS

- Public microwave bands (1500 MHz 58 GHz) for access to utilities' core fibre networks/strategic resilient back-haul.
- Public satellite bands to complement terrestrial services for particular applications.

The European Utilities Telecom Council (EUTC)

The European Utilities Telecom Council (EUTC) is the leading European Utilities trade association dedicated to informing its members and influencing policies on how telecommunication solutions and associated challenges can support the future smart infrastructures and the related policy objectives through the use of innovative technologies, processes, business insights and professional people.

This is combined with sharing best practices and learning from across the EUTC and the UTC global organization of telecommunication professionals within the field of utilities and other critical infrastructure environments and associated stakeholders.

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