

Spectrum demand review - Utilities

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4 October 2018

Background

- 2013 – RSPG Report on strategic sectoral spectrum needs (incl smart energy grids and smart meters)
- 2014 – UHF 1 & 2 Future Demand Final Report (Ofcom)
- 2016 – Consultation: Strategic Review of UHF Band 1 and Band 2
 - demand for smart grid applications may differ between the networks and countries
 - several techniques and spectrum ranges may be suitable to address the relevant requirements
- 2017 – Statement: Strategic Review of UHF Band 1 and Band 2
- 2017 – Consultation: Fixed Wireless Spectrum Strategy
- 2018 – Statement: Fixed Wireless Spectrum Strategy

RSPG Report

- Electricity supply will evolve into centralised and decentralised systems including micro generators and renewable sources
- New elements such as charging points for electrical vehicles will place new demands on utilities
- Spectrum demand may differ between the networks and countries, depending on network configuration, density of nodes, rate of data collection etc.
- For many parts of the network, wireless communication is believed to be the most suitable solution
- Solutions include PMR networks, fixed links, commercial cellular networks (M2M application) and SRD
- RSPG considers that an exclusive designation of spectrum to smart energy grids is not necessary

Ofcom consultations

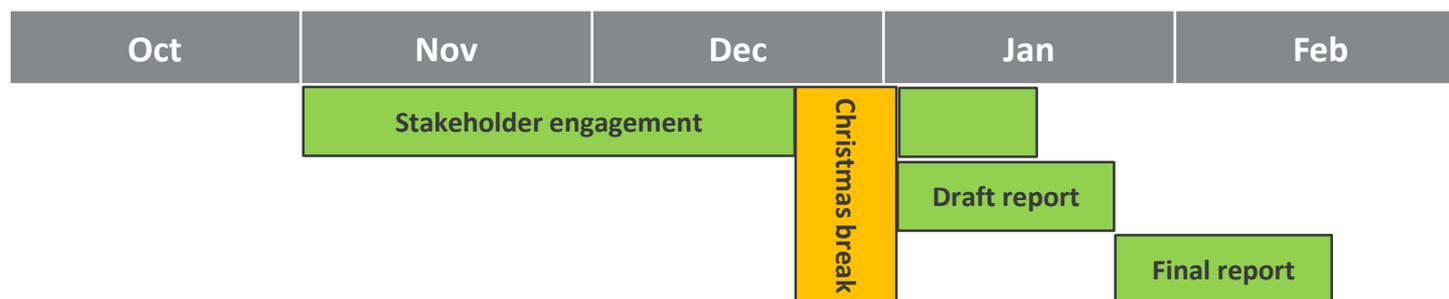
- Differing views on requirement/spectrum demand
- Some suggest 2 x 3 MHz LTE
- Some suggest 64 kbit/s in 25 kHz for some applications and 154 kbit/s in a 50 kHz channel
- Movement to DSO already requires additional spectrum to support the rising number of active components within a distributed and active electricity network
- There are options for communications, and that an exclusive designation of spectrum is not necessary (in line with RSPG)
- We will work closely with stakeholders to better understand their requirements and how they might best be met

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- Objective
 - Research the changes to power generation and their drivers and assess how this impacts the demand for spectrum for this sector.
- Deliverable
 - Internal report setting out findings and recommendation on what action to be taken
- Stakeholder engagement
 - Industry groups and individual companies, Government (BEIS and Ofgem)
- Example questions
 - Explain how the regulatory requirements change the requirements of your wireless network?
 - What are the specific impacts of this (e.g. in Mbps) that will be required to deliver future networks?
 - What are the wireless options that have been explored for your specific needs?

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- Next steps



- If you would like to participate please send your contact details to:
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