

About WHP Telecoms Ltd.

WHP Telecoms Ltd is a UK headquartered and leading supplier of end to end systems integration services for communications infrastructure – from network design, site planning and acquisition and negotiating local regulatory permissions to building, testing and commissioning of all manner of (mainly) wireless and satellite communications infrastructure. We cover a range of sectors from mobile communications to utilities, rail and Local Government. In doing so, we work with all the main wireless equipment vendors as well as a number of specialist technology providers. This diversity of experience gives us a cross-cutting and relatively independent perspective on the key issues in digital communications infrastructure and markets: we are not tied to any particular technology, equipment vendor or network philosophy. Thus we are able to apply learning across sectors, technologies and suppliers to device optimum networks / infrastructure solutions for the connectivity challenge at hand.

Response:

Ensuring spectrum availability to facilitate the increased connectivity requirements for smart grids

Electricity and telecommunications are essential to society and mutually dependent. Without electricity, telecoms networks and devices cannot function and without communications, security and stability of our electricity supply will be undermined. Government's stringent carbon emission targets and the increasing demands due to electrification of energy consumption makes the rapid transition to smart grids an imperative for companies involved in the generation and distribution of electricity. But such networks' increased complexity means that there is a step change in the need for monitoring, control and automation. This in turn entails a major increase in the communications and connectivity requirements for electricity generation and distribution companies who are all as a result investigating, trialling and developing plans to upgrade in the coming few years their communications provision. Organisations in the wider utility sector too are experiencing corresponding challenges for increasing the efficiency of their activity with a similar increase in need for connectivity. The national imperative of implementing smart grids for electricity generation and distribution is future fit communications provision will continue to be drawn from a mix of technologies from publicly available services to satellites and private / self-provided wireless networks. The increasing need for security and resilience however means that the need for private wireless networks will continue, if not increase. This brings with it a spectrum challenge in the UK: the traditional 450 – 470 MHz band used for private business radio, with its incumbent systems and reverse band format (to continental Europe) will not accommodate the electricity / utility sectors' desire to address their future needs with future fit, IP based and internationally harmonised technology. Ofcom has rightly been conducting a dialogue with the energy sector to understand their future requirements for spectrum. As UK's spectrum management organisation, Ofcom is at the heart of solving this spectrum dilemma for the electricity and wider utility industries – the resolution of which is of fundamental importance to the interests of UK consumers and citizens. Other countries are already making spectrum enabling decisions for smart grids.

Clarity on what spectrum will be available for smart grid applications in the UK is needed during 2019 / 20 in order that utility companies can develop their own strategic plans and the communications industry ecosystem with global value chains can make necessary preparations. It is vital therefore that Ofcom recognises in its 2019/20 Annual Plan the objective of working with its fellow regulators, Government, the energy and communications industries to identify suitable alternative spectrum needed for implementing smart grid networks in the UK.