



**JRC Response  
to the Ofcom Consultation  
"Developing a framework for  
the long term future of UHF  
spectrum bands IV and V"**

**JRC Ltd**

Dean Bradley House  
52 Horseferry Road  
London SW1P 2AF

☎ 020 7706 5199

☎ 020 7222 4862

[www.jrc.co.uk/about](http://www.jrc.co.uk/about)

**Key Points**

- JRC welcomes the opportunity to contribute to policy making in relation to long term spectrum planning. Major spectrum allocation changes require decades to achieve, hence necessitate consideration before implementing measures which could with hindsight look ill-conceived.
- Caution must be advised in that in the headlong rush to deliver broadband services, other uses of the radio spectrum are overlooked. To the casual observer, it appears that every time decisions have to be made, broadcasting, broadband data and mobile data are the only applications being considered.
- Policy makers need to ensure that other valuable uses of the spectrum are not excluded as potential beneficiaries of spectrum release programmes. The social and socio-economic impact of alternative uses appears to be neglected as the only valuation of spectrum now seems to be the price it will fetch at auction.
- UHF spectrum is especially valuable for socio-economic use not amenable to pure market mechanisms, ranging from volunteer rescue organisations and emergency services to utilities and transportation. These organisations deliver disproportionate benefits to society (the consumer citizen) compared to the spectrum in use. For example, all the mission critical voice communication of all the emergency services – police, fire, ambulance and companion services – occupies less spectrum than two UHF TV channels; but the benefit to the UK citizen is vastly greater than the benefit that would be derived by two more television services.
- JRC, as spectrum manager for the regulated UK gas and electricity generation, transmission and distribution companies is currently participating in a study of future requirements for the energy sector to deliver the energy policy goals demanded by government – security, sustainability and affordability.
- In parallel, in collaboration with other European utilities under the umbrella of the European Utility Telecom Council (EUTC), JRC is undertaking a study on the socio-economic value of spectrum to the energy utilities to feed into the European Spectrum Policy Programme.
- The UHF spectrum under consideration is especially valuable to utilities as it combines propagation over non-line-of-sight paths and independence from weather degradation with data rates perceived to be required to deliver the Smart Grid.
- Ofcom will be aware of public safety initiatives in USA to designate the 700MHz band for public safety use, and it would be a missed opportunity if the UK, and Europe, in considering future use of bands IV and V were to miss the opportunity for a world-wide harmonised allocation for critical national infrastructure including public safety services, transportation and utilities. Future generations will not forgive lightly those who overlook such an opportunity in exchange for short term financial gains.
- JRC anticipates that the results of its above studies will be available after the summer, and would be pleased to share the outcome with Ofcom in order to inform further consideration.

## **Background on JRC**

- I. JRC Ltd is a joint venture between the UK electricity and gas industries specifically created to manage the radio spectrum allocations for these industries used to support emergency and safety critical operations.
- II. JRC manages blocks of VHF and UHF spectrum for Private Business Radio applications and for telemetry & telecontrol services. JRC created and manages national cellular plans for co-ordinating frequency assignments for a number of large radio networks.
- III. The VHF and UHF frequency allocations managed by JRC support telecommunications networks to keep the electricity and gas industries in touch with their field engineers throughout the country. The networks provide comprehensive geographical coverage to support the installation, maintenance and repair of plant in all weather conditions on a 24 hour/365 days per year basis.
- IV. JRC's Scanning Telemetry Service is used by radio based System Control And Data Acquisition (SCADA) networks which control and monitor safety critical gas and electricity industry plant and equipment throughout the country. These networks provide resilient and reliable communications at all times to unmanned sites and plant in remote locations to maintain the integrity of the UK's energy generation, transmission and distribution systems.

***Adrian Grilli***  
***Managing Director***  
***JRC Ltd***  
***14 June 2011***