



**JRC Response to the  
Call for Input on  
RSPG Report on  
Efficient Awards and  
Efficient Use of Spectrum**

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JRC (The Joint Radio Company Ltd) is pleased that the RSPG recognises:

- auctions 'are not the only option and they sit alongside other processes for awarding spectrum such as beauty contests or hybrid approaches';
- of auctions, 'one size does not fit all without the risk of significantly diminishing overall consumer benefit and economic value';
- auctions should retain 'their evolutionary character, with flexibility at the national level in order to take into account specific local circumstances and market conditions';
- 'Member States respond appropriately to the growth in demand for spectrum from a wide range of existing and new applications' in that 'it is also important to recognise that a wide range of other services<sup>1</sup> will also be looking for access to more spectrum'; and
- 'The EU collectively agreed that 1200MHz was an appropriate target', and beyond which 'the risk of sterilisation of spectrum is at its greatest and where there must be flexibility to meet areas of high demand without sub optimally affecting areas of low demand'.

JRC notes that most products and services supplied to Europe's citizens and consumers depend on the reliable supply of electricity, and that in developed Western Society, electricity is the national infrastructure element on which all other critical services depend. The supervision and control of many generation, transmission, and distribution systems are reliant on resilient machine to machine (RM2M) wireless technologies. This is becoming increasingly important with the growth of smart utility grids to promote security, affordability and sustainability of our energy supplies – exemplified by agreements at the recent Climate Summit in Paris in December 2015.

Transitioning to Smart Grids is expected to require at least a 10-fold increase in remotely monitored locations. The European Utilities Telecoms Council (EUTC) has identified a typical requirement for 2 x 3 MHz of 400 MHz spectrum<sup>2</sup> and 10 MHz of 1.4 GHz spectrum to meet this demand.

JRC therefore requests that RSPG considers the increasing need for reliable electricity and gas supplies and their dependence on suitable and sufficient radio spectrum to support these services in a situation where other commercial telecommunications networks are unable to meet the demanding and exacting requirements of utility telecommunications.

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<sup>1</sup> Including resilient machine to machine (RM2M) Smart Grids.

<sup>2</sup> 380 MHz to 470 MHz.

## **The Joint Radio Company Ltd (JRC):**



JRC Ltd is a wholly owned joint venture between the UK electricity and gas industries specifically created to manage the radio spectrum allocations for these industries used to support operational, safety and emergency communications.

JRC manages blocks of VHF and UHF spectrum for Private Business Radio applications, telemetry & telecontrol services and network operations. JRC created and manages a national cellular plan for co-ordinating frequency assignments for a number of large radio networks in the UK.

These 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. These 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.

JRC's Telemetry Service is used by radio based Supervisory 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.

JRC manages microwave licenses for the majority of UK electricity transmission and distribution businesses. JRC protects these microwave links and the above UHF telemetry links from potential interference from wind turbines, and advises wind farm developers on mitigation methods to avoid interference with all forms of radio communication services.

JRC also undertakes radio consultancy work associated with critical national infrastructure radio services, and participates in European and international regulatory consultation groups.

JRC works with the Energy Networks Association's Future Energy Networks Groups assessing ICT implications of Smart Networks, Smart Grids & Smart Meters. Internationally, JRC supports or participates with global utility telecoms organisations under the umbrella of the Global Utility Telecom Council:

- US Utility Telecom Council (UTC)
- European Utility Telecom Council (EUTC)
- Latin American Utility Telecom Council (UTCAL)
- Canadian Utility Telecom Council (UTCC)
- African Utility Telecom Council (AUTC)

**ENDS**