



# **JRC Response to the Consultation on opportunities for future use of spectrum within VHF Band III and in the 1.5 GHz Band.**

## **Key Points**

- JRC welcomes the opportunity to comment on this consultation.
- This is not an area of vital importance to JRC and its member companies, but we offer our comments in the hope that they may be of assistance to the regulatory authorities in discharging their duties.

## **Answers to specific questions posed in the consultation**

### **VHF Band III**

***Q1. Should available spectrum in LMS sub-band II and/or III be used to ease capacity restrictions in other PAMR/PMR bands?***

Yes, in so much as use of these sub-bands will not be adversely affected by increased restrictions on their use imposed under section 7.2.2.

***Q2. Is there an anticipated market for digital PMR in Band III?***

Users like to see multi-vendor support for expensive new technology. Manufacturers like to see a large market before committing investment, on a regional basis or ideally globally. It is not clear at present whether a sufficiently large market exists for suppliers to want to make products available.

***Q3. Do PAMR operators foresee an increase in demand for spectrum in Band III to accommodate a growing customer base?***

Not applicable to JRC.

***Q4. Is there anticipated demand for Band III spectrum by the bus and coach or rail industries?***

Not applicable to JRC.

***Q5. Is there anticipated demand for more VHF spectrum for Terrestrial Digital Audio Broadcasting (T-DAB)? On what timescale is this needed, and, in general terms, what should the development priorities be?***

By its nature, demand for broadcasting spectrum is always likely to exceed supply unless government imposes artificial constraints to the demand side (eg onerous ownership or programming constraints).

**Q6. Is there anticipated demand for VHF spectrum for mobile, portable and fixed data/multimedia services?**

New multi-media services need a global market, and it is unlikely that VHF spectrum will be made available in sufficient countries to make this attractive. In addition, VHF spectrum has a limited capacity for carrying multi-media services, which makes it an unattractive option.

**Q7. Is there anticipated demand for more VHF spectrum for programme-making purposes?**

Not applicable to JRC.

### **1.5 GHz Band**

**Q8. What is the demand for the 1.5 GHz Band spectrum for T-DAB digital radio multiplexes licensed under the Broadcasting Act, and what factors should influence the size of multiplexes?**

Not applicable to JRC.

**Q9. Is there anticipated demand for the 1.5 GHz Band spectrum for mobile, portable and fixed data/multimedia/broadband services?**

Yes, this band could possibly be used for these services.

**Q10. What is the demand for the 1.5 GHz Band spectrum for the delivery of digital radio, data etc services via satellite?**

Not really applicable to JRC. The existing satellite bands seem to have enough capacity for data services to meet our requirements.

**Q11. Is there demand for the 1.5GHz Band spectrum for any other services on a secondary basis?**

JRC understands that in some countries, bands exist in this part of the spectrum for deregulated telemetry and telecontrol applications (believed to be the case in the USA), but we have no particular knowledge of whether a demand for such a service exists in the UK, and how it might interact with a licensed service.

### **Detailed Comments**

- If as stated in section 7.2, there is to be a regional planning conference affecting potential future use of this spectrum for broadcasting, it seems unwise for the UK to take any action which might be adversely affected by any decisions from this Conference. On a number of previous occasions, utilities have found themselves disadvantaged by new restrictions imposed following World or Regional Radio Conferences, especially where decisions have been taken about future broadcasting use. If OFCOM were to facilitate use of this spectrum before this Regional Conference for a service which were then adversely affected by proposals at the Conference, OFCOM would come under pressure to change its position at the Conference to defend whatever action it has taken, which may not be in the UK's best interest, or may not be achievable.
- Paragraph 9.2.2 states that "digital radio receivers tune across the range 174-240 MHz". Before any further allocations are made outside of existing bands, it

would be essential to prove this assertion. Previous experience indicates that mass-market manufacturers rarely equip products to receive frequencies outside of the common frequency ranges, as listeners to 'long wave' have found to their cost.

## **Background**

A. 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 emergency and safety critical operations. JRC also represents gas and electricity interests to government on radio issues.

B. JRC manages 4 MHz of spectrum, of which 2.8 MHz is for PMR applications and 1.2 MHz for telemetry and telecontrol services. JRC created and manages a national cellular plan for co-ordinating frequency assignments for some of the largest PMR networks in the UK. Virtually all of the telemetry and telecontrol services and a significant proportion of the PMR services operate in the 450-470 MHz band which is the subject of this consultation.

C. JRC manages VHF and UHF allocations. These networks 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.

D. The Scanning Telemetry Band 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 reliable communications to unmanned sites and plant in remote locations.

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