

Additional comments:

4RF Communications Ltd is based in New Zealand and operates in the UK via 4RF Communications (Europe) Limited Registered No. 05282799. The company manufactures digital microwave equipment operating in the fixed service bands below 3 GHz that are vital to public safety and critical infrastructure. The company supplies more than 118 countries and has many UK customers.

Question 1: Is there demand to use the band for wireless cameras?..

Broadcasters have the well established option of mobile satellite uplinks for their remote ENG and PMSE operations, while in-venue requirements are traditionally accommodated with tethered cable based means.

Question 2: Is there demand for other uses of the band?:

4RF continues to see demand for point to point microwave links suitable for operation over long distance paths in the UK. This demand is from both rural telecommunications operators and the utility industry. Such demand has traditionally been met at 1.4 GHz and other bands. However the application of these bands is limited by congestion and instances of interference, primarily from radiolocations services such as radar.

Question 3: How might demand for the band change in the foreseeable future?..

The revitalization of the electricity grid, commonly termed the Smart Grid, coupled with the increase in engagement with customers, termed Smart Metering, is driving an increase in demand from utilities for more fixed links to service these applications while meeting regulatory demands from Ofgem for improved resilience. The electricity industry is not alone as similar requirements exist from Ofwat for better resilience in water distribution networks. These requirements and other security concerns in relation to these vital networks have been highlighted by the UK Minister of State for Security and Counter-Terrorism, the Rt Hon Baroness Pauline Neville-Jones on March 11 this year. Improvements in monitoring and control of public utility networks require fixed radio links to implement communications that in many cases must operate over long distances. Presently there is inadequate spectrum to accommodate this growth and the proposed release of 2010-2025 MHz will exacerbate the shortage.

Question 4: Should any wireless-camera use of the band be licence-exempt?..

If a licence-exempt regime is introduced it will be difficult to later show that the band is under used in later assessments leading to inefficient spectrum utilization.

Question 5: Should any other use of the band be licence-exempt?..

No. This spectrum is too valuable for licence-exempt services.

Question 6a: If we allocate the band to PMSE, is there good reason not to set TLCs to allow all of 2010-2110 MHz to be treated as a single band?..

2025 ? 2110 MHz (paired with 2200 ? 2290 MHz) is a vital band for the Space Service and remains an option for the Fixed Service. 4RF believes that blurring the distinction between band edges in the manner proposed negates the very essence of ITU spectrum harmonisation and will inevitably lead to inefficient spectrum utilization.

Question 6b: If so, what TLCs should we set?..:

PMSE TLCs should respect ITU allocation delineations.

Question 7a: If we allocate the band to PMSE, is there good reason not to provide the same security of tenure as for other PMSE-allocated bands?..:

4RF believe that utility development of critical UK infrastructure will increasingly demand continued access to fixed link bands, particularly in the spectrum around the 2 GHz essential for medium distance links.

Question 7b: f so, what security of tenure should we provide?..:

The security of tenure should reflect the inevitable growth of critical infrastructure and properly weigh the balance between the need for public safety against that of entertainment.

Question 8a: If we allocate the band to PMSE, is there good reason not to set fees for access on the same basis as most of the spectrum at 2-3 GHz used for wireless cameras?..:

4RF has no comment on this.

Question 8b: If so, how should we set fees for access?..:

4RF has no comment on this.

Question 9a: If we do not immediately decide to allocate the band to PMSE, is there good reason not to allow temporary use for wireless cameras in line with our approach to the 2290 MHz band?:

4RF has no comment on this.

Question 9b: If so, what should we do until we make and implement our decision on the best way to release it?:

4RF has no comment on this.

Question 10: Do you agree we should make the 2010 MHz band available for the Olympics?..:

Yes, but only with a clear proviso that such an accommodation is for the specific Olympic event. 4RF note that many such temporary access arrangements have been very difficult to later remove.