

Response to Ofcom Consultation - DDR Band Manager Award

The Spectrum for Programme Makers Forum broadly welcomes Ofcom's consultation on the Band Manager Award. The Forum has no constitution and so this response to the consultation is general in nature. Members of the Forum will most likely be responding individually and these responses may contain more detailed points.

Spectrum for wireless cameras

We note that Ofcom has attempted to address some of the concerns expressed by wireless camera users - e.g. by including some spectrum in the 2Ghz band in the Band Manager award. We welcome these steps, and also welcome Ofcom's recognition of the relatively small opportunity costs associated with this band

However, we remain concerned about the overall levels of spectrum that will be available in the future. Specifically, valuable capacity for PMSE use has already been lost due to the 2.6Ghz award (through which 19 channels of spectrum will be lost), and there is also a great deal of uncertainty about the potential for increasing background noise (interference) from new uses and its effect on PMSE use. Moreover, Ofcom should note that significant investment will be needed in order to develop or tune equipment suitable for use in the different potential spectrum bands that might be available for wireless camera use. To this end, clarity of spectrum access is critical - as making available equipment that operates in all potential bands would be an inefficient use of resources. In addition, security of tenure is crucial in order to ensure that investment incentives are not harmed. Our concerns over protection of PMSE users are particularly relevant here. If wireless camera operators and manufacturers have to invest in new equipment capable of use in alternative spectrum bands, then it is vital that the spectrum in those bands is not arbitrarily revoked by Ofcom on spectrum management grounds.

MOD Spectrum:

SPMF sees a possible future solution to the impending shortage of spectrum for PMSE use through the sharing of certain bands currently solely occupied by the Ministry

of Defence. We believe that there is great scope for PMSE and MoD to co-exist within certain bands, enabling the continued use of bands for MoD operations, while permitting access to greater spectrum by PMSE. PMSE use of spectrum tends to be highly geographically localised and temporary, meaning there is very limited risk of interference with MoD functions. **The bands between 2.7 and 3.3 GHz appear to us to be particularly appropriate.** We hope Ofcom and the MoD will continue to consider all available options in this regard.

The 7 GHz band:

The SPMF technical sub group will be exploring, with industry suppliers, the availability and suitability of equipment operating in the 7GHz band and its operating properties to mitigate loss of spectrum at 2.6GHz.

Early tests at 7GHz have shown that for stadia use, and some controlled environment OB's, the band performs satisfactorily. However, for Newsgathering, further work needs to be undertaken to ensure link performance is maintained especially for non line of sight and less predictable environments.

First, observations were that more transmit power was needed to recover the link budget at a given range, but that receivers were also prone to overload in some cases. For OB use this implies that battery consumption, weight, safety and receiver design will continue to challenge suppliers.

Overall the sub group aims to produce an ideal set of specifications for suppliers to work with, and hopefully they will be able to produce a wider range of products that can operate successfully within the higher frequency bands.