

## **Orange UK Response to ‘Release of the 59 – 64 GHz Band’ September 2009**

Orange, as an operator of a significant number of point to point radio systems, is pleased to respond to the Ofcom consultation. *‘Release of the 59 – 64 GHz Band -A consultation on a licence exempt approach for Fixed Wireless Systems in the 60 GHz Band’.*

### Question 1: Do you agree

a. *With the proposal shown in figure 1 to combine the existing 57 – 59GHz band with the new 59 – 64 GHz band for Fixed Wireless Systems? – see also question 3.*

b. *that the CEPT channel plan given in ECC/REC/(09)01 should not be mandated with the exception of two 100MHz guard bands at the band ends to protect adjacent users? and that a flexible band structure is appropriate for facilitating access to the 57 – 64 GHz band?*

a. Please refer to Question 3 in relation to Orange reservations about the creation of a single licence exempt band.

b. Orange generally supports that harmonisation is desirable to ensure that economies of scale in radio equipment manufacture are achieved. However Orange accepts not mandating a channel plan in the context that it does not prevent the use of ECC/REC/(09)01 channel plan harmonised equipment. Orange supports the use of 100MHz guard bands (subject to relevant out of band emission limits being achieved with wider bandwidth channels).

### Question 2: Do you agree that a maximum EIRP limit of 55dBm together with a maximum transmitter output power limit of 10dBm are the minimum technical conditions required to allow flexible use of this band by FWS while maintaining adequate protection of other services?

Orange agrees that the limits proposed should be sufficient to protect neighbouring services. Orange is pleased to note that the 10dBm transmitter power limit encourages the use of high performance narrow beam width antennas if operators are to fully utilise the 55dBm EIRP limit. Orange does not agree that co-channel services, will in the context of high reliability systems, always be sufficiently protected.

Question 3: Do you agree with a licence exempt approach for the 60 GHz band?

Orange has reservations with respect to a licence exempt approach in that it leaves no spectrum above 55-57GHz in which deployment of fully protected, robustly radio planned, point to point systems is possible. In its response to Ofcom's 2006 consultation 'Making Spectrum Available in the 71-76GHz & 81-86GHz Bands' Orange noted its reservations with respect to the robustness of aspects of the light licensing radio planning regime proposed for that spectrum. Orange accepts Ofcom analysis that high atmospheric absorption will minimise wide area interference but local interference between co-channel, co-located systems remains possible. Operators who require high reliability transmission systems may therefore have no option but to use lower frequency bands at lower efficiency.

In formulating future pricing policy in relation to the immediately adjacent lower frequency mixed bathing bands (with reference to minimum path length), Ofcom should note the lack of effective alternatives for some operators.