

Response to the consultation document :-

Release of the 59 - 64GHz band- dated 16th July 2009

Introduction

Huber + Suhner (UK) Ltd welcomes this consultation on the release of an under utilised area of spectrum. It is noted, that the consultation document references the recent European Commission determination (2009/381/EC) on SRD licence exemption, to be incorporate in Statutory Instrument "Electronic Communications - The Wireless Telegraphy (Short Range Devices) (Exemption) Regulations 2009."

This current consultation makes note to specifically exclude comment on this EC determination. However the alignment of parameters and legislative control within the EC determination and the approach envisaged within this consultation, raises the issue as to why the timetable in this consultation for the release of the band for FWS applications, will in effect delay access to the band for a further 12 months.

We consider this is an unnecessary delay, given the EC determination, which in effect releases the whole band 57 – 66GHz as a licence exempt band.

This EC determination makes the EIRP permitted for fixed link deployment the only variable under practical review within this consultation.

In addition there has been released, accepted and implemented, European Norm (ETSI EN 302 217-3 V1.3.1 (2009-07) which regulates the technical parameters of such equipment. Therefore there are clear coexistence parameters for Fixed Wireless Equipment and Short Range Devices (SRD)

The 60GHz band, oxygen absorption characteristic, offers we believe, a unique capability of only operating over limited range. This limitation, it could be argued, aligns its usage with the generic characteristics of Short Range Devices.

If this is accepted as a characteristic, it could be argued that the existing SRD controls could be adapted, within the UK, to encompass fixed link applications, the subject of this consultation.

Question 1

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?

Response

a) We agree with the incorporation of the 57 – 59GHz band into the proposed consolidated spectrum band of 57 – 64GHz.



b) We support the introduction of the two 100MHz guard bands at either end of the 57 to 64GHz band, if that enables a flexible band structure to be adopted where channelization is initially not required but could be implemented at a later stage as equipment develops, as suggested in the ECC /REC (09)01. In our collaboration in CEPT and co-development of the ECC/REC (09)01 we clearly understood this channel plan as a future possibility for implementation and not a mandatory part of the implementation.

Question 2

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?

Response

We support a simplification of technical requirements as a means of encouraging usage of the spectrum.

However, within the ECC/REC (09)01 reference is made to the minimum antenna gain requirement of +30dBi. It is our understanding that this requirement reflects the need for narrow beam systems as a means of ensuring minimal interference between deployed systems. This aspect needs to be considered alongside the possible deployment of nomadic systems within the band, albeit currently set at +25dBm EIRP power levels.

This directivity issue should be seriously considered given the ongoing work package of the Short Range Devices Maintenance Group (SRD/MG). It is understood this group have been tasked by CEPT to review the differing EIRP values permitted for indoor and outdoor usage. (Revision of ERC Recommendation 70-03 annex 3.)

We seriously doubt the sustainability of the current SRD regulation where effectively, indoor equipment could migrate into the outdoor nomadic environment without changing emission parameters.

If this SRD/MG review was to erroneously conclude that +40dBm EIRP levels were to be deployable across the whole 57 – 66GHz band (ref. SRD exemption regulations 2009) irrespective of indoor or outdoor deployment (currently differentiated by power levels of +40dBm and +25dBm respectively) then this could seriously impact FWS usage.

In consequence the usage of high gain, narrow beam antenna would be essential to maintain efficient usage of the spectrum in those high density environments, which we consider to be the prime deployment market.



Question 3

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

Response

Huber + Suhner support the rapid opening of the spectrum for commercial usage. If a licence exempt approach offers a quicker conclusion to the indecision that has surrounded this band release, we will of course support such a view.

With reference to the timetable envisaged, we would suggest that given the determination now incorporated in to the Statutory Instrument "Short Range Devices (Exemption) Regulations 2009" it is not necessary to await a full review of the Ofcom consolidation policy "Consultation on licence exemptions", as the spectrum has been released for licence exempt usage under EC determination. Ofcom is obligated to comply with such determinations. What is at issue is, fixed link deployment and the appropriate EIRP level.

It is our belief that Ofcom could, at the end of this consultation period, move directly to the Final Regulatory Statement on licence exemption in the 57 - 64GHz band. This is especially so as the existing released spectrum (57 - 59GHz) which is proposed to be merged into the new band, is already classified for licence exempt usage at an EIRP of +55dBm..

Conclusion

The release of the 59 - 64GHz band and its incorporation into a licence exempt band extending from 57 – 66GHz has been in effect already addressed by the SRD determination. Given this consultation proposal favours a licence exempt release for FWS usage, then the only issue is the addition of a FWS EIRP parameter to that determination at a national level, and the identification of the three exclusion zones.

It is believed to be within the bailiwick of Ofcom, to add a FWS characteristic within the UK, at an EIRP of +55dBm to those parameters already determined for +40dBm indoor and +25dBm outdoor (mobile/nomadic), usage of this extended spectrum. The only variable being for FWS usage at +55dBm the band limit is 57 - 64GHz within the 57 – 66GHz band.



Illustration of relative power and band usage resulting.

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