

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title: Making spectrum available in the 71-76GHz and 81-86GHz bands

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Name of respondent: Jane Cooper

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CONFIDENTIALITY

What do you want Ofcom to keep confident?

Nothing Name/contact details/
Job title

Whole response Organisation

Part of the response If there is no separate annex, which parts?

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Yes No

DECLARATION

I confirm that the correspondence supplied with the cover sheet is a formal consultation response. It can be published in full on Ofcom's website, unless otherwise specified on this cover sheet. If I have send my response by email, Ofcom can disregard any standard email text about not disclosing email contents and attachments.

Name _____ Signed (if hard copy) _____

Orange Response to Ofcom Consultation Document 'Making Spectrum Available in the 71-76GHz and 81-86GHz Bands.

Orange welcomes the opportunity to respond to the consultation document which sets out Ofcom's proposals to open the 71-76 GHz and 81-86 GHz spectrum bands for point to point broadband fixed wireless systems on a light licensed basis. As the consultation states, these bands currently have little or no use and are therefore available for a wide range of wireless applications. Technology is now emerging which could be used to provide a broad range of products and applications such as high capacity fixed point to point wireless area networks and broadband internet access.

Question 1

Do you agree that the Amateur and Amateur-Satellite allocations in the 75.5 – 76 GHz band should remain in the UK Frequency Allocation Table after 31st December 2006 on a secondary basis? If not, what would you suggest as an alternative approach? Also, what is your view on permitting the secondary Amateur and Amateur-Satellite allocation in the 81 – 81.5GHz band within the UK Frequency Allocation Table?

Answer 1

Orange does not have any comment.

Question 2

Do you agree that a light licensed approach is appropriate to facilitate access to the 71-76 GHz and 81-86 GHz bands?

What are your views on the need to provide a regulatory mechanism for interference protection of fixed links operating in the 71-76GHz and 81-86GHz bands?

Do you agree that links registered in the database require a date/ time priority rule for establishing interference protection of links?

Answer 2:

For Fixed Service applications in these bands, Ofcom intends moving away from the traditional centralised planning and implement a more flexible and lighter licensing approach. Such an approach would enable operators themselves to conduct the necessary interference analysis and co-ordination of links as required.

To implement such a process three main elements are proposed:

- i) applicants are granted a non-exclusive national licence;
- ii) the database is made available to all licensees with a date, time protection rule. The date and time record is made in order to ensure that links registered on the database take priority over others registered later, and
- iii) licensees are given access to an e-enabled user interface so that they are able to access the database, examine the technical details of existing links, register their new links and modify or cancel their existing ones.

Orange supports the use of light licensing in this context. We believe that the proposal to adopt a date, time protection rule should be sufficient to establish precedence rights in relation to protection of links from interference. However, Orange believes that clear interference definition and process rules need to be established to ensure precedence is claimed on the basis of due diligence and assessment of interference to surrounding systems. These process rules and interference definitions should be clearly established before release of the spectrum.

Question 3

Do you agree that a fee based on £50 per link per year provides the right balance between allowing access to spectrum and discouraging the hoarding of 'paper' links within the registration Database. If not, what would you suggest as an appropriate fee to achieve these aims?

Answer 3:

Orange believes that the £50 per link per year is appropriate but that it should be subject to annual review of demand and hoarding activity.

Question 4

Do you agree that the CEPT channel plan ECC/Rec(05)07 should not be mandated and that a flexible band structure comprising of two national spectrum blocks of 4.75GHz is appropriate for facilitating access to the 71-76GHz and 81-86GHz bands?

Answer 4:

In October 2005 CEPT adopted Recommendation ECC/Rec/(05)07, 'Radio Frequency Channel Arrangements for Fixed Service Systems Operating in the Bands 71-76 GHz and 81-86 GHz' which defines a set channel arrangement for these spectrum bands. In order to provide the maximum flexibility for fixed wireless applications, Ofcom proposes that the channel plan is not mandated.

Orange believes that in the interests of harmonisation and economies of scale of equipment that CEPT channel plan ECC/Rec (05/07) should be mandated. Given the possibility of channel aggregation under this plan, Orange believes that sufficient flexibility still exists within this channel plan for innovation to occur. Orange also believes that mandating a channel plan will simplify inter-system interference assessment for operators who will be looking for as near 'plug and play' functionality as possible, thereby increasing the likelihood of the success of the allocation of this spectrum. Self coordination relies on operators being technically able to assess rf performance with foreign systems and certainty of channelisation would aid this process.

Orange does not support Ofcom's proposal to implement sub duplex arrangements within each band of the primary duplex. We do not believe that this will lead to the most efficient use of spectrum and will not enable operators to implement harmonised systems.

Question 5:

In addition to the date/ time priority rule do you think it would be beneficial for Ofcom to set a maximum interference threshold policy for the 71-76GHz and 81-86GHz bands? If so, do you have suggestions for the criteria and how this could be assessed?

Answer 5:

In order to provide a clear reference point in which to determine unacceptable interference Ofcom is considering specifying a maximum interference policy for the bands. This interference level could be used by operators when making an interference calculation to determine whether the introduction of a new link was likely to cause an interference problem.

Orange supports the use of a maximum interference threshold with an I/N of -6dB. However, we believe that this should be an aggregate value, not a single entry, to prevent excessive cumulative degradation of quality of service in areas of heavy use. Orange suggests the use of a single entry I/N of -9dB as the trigger for coordination to assess whether minimum aggregate requirement of victim I/N of -6dB is exceeded. Such a cap would provide certainty that interference issues can be resolved to a minimum QOS for a victim system.

Question 6

Are there any regulatory impacts or other considerations not otherwise mentioned in this consultation that you believe are relevant to the 71-76GHz and 81-86GHz bands?

Answer 6:

Orange urges Ofcom to consider, prior to the implementation of these proposals, the areas that have still not been resolved such as spectrum usage rights and dispute resolution so that players who wish to operate in this market understand and are able to meet their obligations.
