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What do you want Ofcom to keep confidential?:
Keep nothing confidential
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Yes
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Yes
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#### Question 1: Do you agree that the spectrum commons model should be the preferred approach for licence-exempt use of spectrum, and that application-specific allocations should only be considered where technical constraints or safety issues require this?:

It is important that the principles established in the Framework ensure that the spectrum allocated to licence-exempt use is fully utilised. Thus there is a need to ensure that the rules and regulations provide the flexibility required to achieve this. It is considered that the spectrum commons provides the most appropriate way to ensure that this is achieved. The spectrum commons concept reduces the involvement of the regulator to the minimum necessary and effectively allows the market to decide on spectrum usage.

In the supporting documentation to this consultation there is some material indicating that the ?per MHz? the value of licence-exempt spectrum is much greater than for licensed spectrum. It is understood that the value taken for licensed spectrum was produced for another purpose and calculated on a different basis. Therefore it is considered that the comparison is not valid. However this material is important in showing the value of licence-exempt spectrum and it is considered that further studies should be undertaken to provide a realistic comparison of the economic value resulting from different licensing approaches. There is some separate research that indicates licence-exempt spectrum is used more efficiently than licensed spectrum though this does vary between applications.

### Question 2: Do you agree with the proposal for multiple classes of spectrum commons?:

The establishment of separate commons for technologies with common characteristics appears to be a valid approach. However there is a need to consider how many technologies with similar characteristics exist and the amount of spectrum required to establish the appropriate number of commons.

### Question 3: Do you agree with the distinction made between the licence-exemption and light-licensing regimes?:

We agree with the distinction between the two types of regime though we note in the EC work on the Collective Use of Spectrum that light licensing is considered to be a form of licence-exempt use.

### Question 4: Do you agree with the view that the licence-exemption and light-licensing regimes will converge in the future?:

It is considered that some spectrum blocks that are currently lightly licensed will become licence-exempt in future. However it is also considered that in future an increasing amount of spectrum and the associated applications will become subject to light-licensing. Not all of these uses will be appropriate for licence-exemption so it is envisaged that both types of regime will continue to exist and growing in importance.

### Question 5: Do you agree with the proposed mixture of licence-exempt and light-licensed use of the 105-275 GHz spectrum? Do you agree with the bands that have been identified for such use?:

The preference is for a combination of option 1 and option 2 with at least 114 GHz of spectrum being licence-exempt with the balance lightly-licensed. This will require the establishment of suitable parameters for the spectrum in Group 2 to ensure effective coexistence of the different applications using this spectrum. This approach is based on expected usage requirements and propagation characteristics.

### Question 6: Do you agree with the view that the use of the 275-1000 GHz spectrum should be licence-exempt?:

We agree that this spectrum should be licence-exempt. This view is based on propagation characteristics and other technical factors.

Question 7: Do you agree with the view on the levels of future demand for licence-exempt usage in the 40-105 GHz spectrum? Do you agree that the Group-A bands identified above should be considered for licence-exempt use? Do you agree that licence-exempt and light-licensed use of the Group-C bands identified above should only be considered when there is evidence of demand for such use?:

It is considered that some of the spectrum shown as light-licensed might be more appropriately classified as licence-exempt, in particular some of the spectrum allocated to fixed links and BFWA. It is considered that there is a need for some flexibility on the amount of spectrum provided as it is felt that the actual amount required for various applications could differ from that predicted. We agree that use of Group C bands should only be considered when there is evidence of demand for such use. However we wonder if any of this spectrum might be made available for experimental or PMSE use on a temporary licensed basis pending long-term usage developments?

# Question 8: Do you think it could be desirable for transmissions at levels below certain power spectral density limits to be exempt from licensing?:

We agree that emissions below a certain spectral density should be exempt from licensing. Additionally with the possible development of other means of managing interference there may need to be a more closely defined relationship between power spectral density limits and licensing conditions. This could result in an extension of the light-licensing regime to additional applications with a low power spectral density.

#### Question 9: Do you agree with the transmission limits proposed in this document?:

Generally we are in agreement with the proposals in the consultation document subject to the above comments. For the non-UWB devices there may need to be a review of the excluded frequency bands to ensure that the exclusion is fully justified.

### Question 10: Do you agree with the harmonisation strategy discussed above in the context of licence-exempt device?:

Generally we are in agreement with the proposals. However we consider that market forces should be used to the greatest possible extent to provide guidance on the strategy to be followed in the provision of spectrum for licence-exempt applications. This may require the development of some novel concepts for determining value and usage of such spectrum.

## Question 11: Do you agree with the view that no additional regulatory instruments, beyond those available today, are required for the protection of licence-exempt equipment:

Currently there does not appear to be any need for additional regulatory instruments. However with the evolution of new interference management regimes there may be a need for additional/different regulatory instruments to those currently available. Additionally the work that the EU is doing related to the collective use of spectrum may require different regulatory instruments to those currently available. This work is at an early stage and it is difficult to predict how this will develop. There may be a need to examine what is happening outside Europe where there may be different concepts and approaches that may be valid to the UK situation.

#### **Comments:**