

Your response

Question	Your response
<p>Question 1: Hybrid sharing could mean that the upper 6 GHz band will be used for mobile outdoors and Wi-Fi indoors. What are your views on the priorities for each of these two services, assuming that suitable coexistence mechanisms are developed?</p>	<p><i>Is this response confidential? – N</i> <i>This in my opinion is an acceptable way to share the U6 spectrum, with a mixture of high, medium, and low power use. Where the incumbent has a high-power fixed link using this spectrum, consideration should be given in favour of the incumbent to have adequate separation, thus preventing interference, and overlapping U6 spectrum.</i></p>
<p>Question 2(a): Hybrid sharing could mean that the upper 6 GHz band will be used for mobile in some locations, and Wi-Fi in others. We would like feedback on the priorities for each of these two services, assuming that suitable coexistence mechanisms are developed.</p> <p>From the point of view of mobile, is the upper 6 GHz band most useful to provide outdoor coverage, or indoor coverage? Is it most useful in urban areas, or in those base stations that are currently carrying more traffic, or some other split?</p>	<p><i>Is this response confidential? – N</i> <i>Assuming suitable coexistence mechanisms are developed and deployed then priority could be given in urban areas to indoor low power use (RLAN). The key for this approach in rural areas where there are fixed links being used for important communication links, is that enough separation is given to prevent any risk of interference, and the incumbent would be prioritised over other U6 allocations.</i></p>
<p>Question 2(b): Similarly, what are the priorities from the point of view of Wi-Fi deployments?</p>	<p><i>Is this response confidential? – N</i> <i>Low power Indoor would be prioritised over external (outdoor) low power use.</i></p>
<p>Question 3: What are your views on a modified AFC or SAS-type approach to enable hybrid sharing? What additional work do you think would be required?</p>	<p><i>Is this response confidential? – N</i> <i>If this method of database control was in use, it would allow the switching of traffic models during peak usage.</i></p>
<p>Question 4: How could existing access protocols and sensing mechanisms be leveraged (i.e., those in Wi-Fi or 5G NR-U) to enable hybrid sharing?</p>	<p><i>Is this response confidential? – N</i> <i>I have no response to this question</i></p>

<p>Question 5: What mechanisms could potentially enable device-to-device connectivity?</p>	<p><i>Is this response confidential? – N I have no response to this question</i></p>
<p>Question 6: If hybrid sharing is eventually adopted, and requires licensed mobile to operate at medium power, in what way would mobile networks use the upper 6 GHz band?</p>	<p><i>Is this response confidential? – N Channel spacing to be kept to a minimum where possible to prevent overlap.</i></p>
<p>Question 7: How would you suggest that the mechanisms presented here can be used, enhanced, or combined to enable hybrid sharing or are there any other mechanisms that would be suitable that we have not addressed?</p>	<p><i>Is this response confidential? – N I have no response to this question</i></p>
<p>Question 8(a): Assuming the future of the band includes indoor use for Wi-Fi and outdoors use for mobile:</p> <p>How could this be achieved without creating or suffering interference?</p>	<p><i>Is this response confidential? – N Improved building radio shielding should be considered and developed in line with recommendations from the various building regulatory bodies.</i></p>
<p>Question 8(b): Could there be a combination of technical adjustments such as power limits and other mechanisms (including databases or sensing mechanisms)?</p>	<p><i>Is this response confidential? – N Power reductions/limits would be the only relevance for our (MCA) fixed link purposes.</i></p>
<p>Question 9(a): We are interested in input about the importance of the upper 6 GHz band for its incumbent users, and on the potential impact of hybrid sharing of the band.</p> <p>What evidence do you have on whether incumbents are likely to coexist with hybrid sharing of the band with mobile and Wi-Fi? Are there unique advantages of the upper 6 GHz band for these uses?</p>	<p><i>Is this response confidential? – N I have no response to this question</i></p>
<p>Question 9(b): What are your views on the initial analysis we have conducted around hybrid sharing and coexistence with incumbents?</p>	<p><i>Is this response confidential? – N Your findings that mobile signals will impact wifi throughputs, increase latency and in some cases stopping throughput. Will this favour mobile, fixed link sharing over hybrid between mobile and wifi. It would be detrimental to fixed link mobile use if the spectrum was shared by reducing power and/or overlapping channel and sub carrier space.</i></p>
<p>Question 9(c): For any incumbent uses that you view as unlikely to be able to coexist, what alternatives are there? What are the barriers that might prevent those alternatives?</p>	<p><i>Is this response confidential? – N The alternatives would be for Ofcom to licence other spectrum in areas where incumbents take a priority over new shared use within the vicinity. The barrier for this would be availability of those alternate frequency bands.</i></p>

<p>Question 10: Do you have any other thoughts that you would like to share about hybrid sharing in the upper 6 GHz band, or about hybrid sharing more generally and its potential for applications in other bands?</p>	<p><i>Is this response confidential? – N</i> <i>My interpretation of the relevance of this proposal, is that it is mainly for urban use of the U6 spectrum, and I note you have already implemented it for L6, presumably mostly urban also. Have you evidence to support any usage in rural areas and in particular locations where there are shared (L6) incumbents with new mobile installs? Have any of these resulted in impact to the incumbent?</i></p>
<p>Question 11: Do you have any other comments to make on these proposals or on the future use of the upper 6 GHz band?</p>	<p><i>Is this response confidential? – Y</i> <i>[REDACTED ✂]</i></p>

Please complete this form in full and return to Hybridupper6ghz@ofcom.org.uk.