

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></p> <p>N/A</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></p> <p>N/A</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></p> <p>N/A</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></p> <p>N/A</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></p> <p>N/A</p>
<p>Question 5: What mechanisms could potentially enable device-to-device connectivity?</p>	<p><i>Is this response confidential? – N</i></p> <p>N/A</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</i></p> <p>N/A</p>
<p>Question 7: How would you suggest that the mechanisms presented here can be used,</p>	<p><i>Is this response confidential? – N</i></p>

<p>enhanced, or combined to enable hybrid sharing or are there any other mechanisms that would be suitable that we have not addressed?</p>	<p>N/A</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?</i> – N</p> <p>N/A</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?</i> – N</p> <p>N/A</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?</i> – N</p> <p>Avanti Communications appreciates the opportunity to comment on this consultation at an early stage in Ofcom’s policy development for this issue.</p> <p>Within the frequency band 6425-7125 MHz Avanti operates critical Telecommand (TC) Uplinks that are received by its operational satellites Hylas 2 and Hylas 4. Avanti relies on these TC uplinks for the TT&C operations of its satellites.</p> <p>It is critically important that the TC receivers onboard our spacecraft do not experience undue interference. Such interference would compromise the safe operation of our space stations. The UK is the launching state and responsible Administration for both of these space stations.</p> <p>This spectrum access is provided through PES licences issued by Ofcom.</p> <p>These satellites provide substantial benefits for citizens and consumers in the UK and overseas. These satellites are already in orbit and the TT&C frequencies are hardwired into the spacecrafts’ design and cannot be changed.</p> <p>Avanti’s reliable access to these frequencies is vital to the safe operation of its satellites, and the benefits arising from its satellite system.</p> <p>Avanti fully trusts that while developing its proposals, Ofcom will ensure that links enabled</p>

	<p>through PES licences continue to be protected from undue interference.</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</i></p> <p>Avanti Communications agrees with the conclusions of Ofcom’s initial analysis, that shows that mobile and Wi-Fi networks would cause interference to Fixed Satellite Services, including those authorised by PES licences.</p> <p>Avanti also agrees with the conclusion from Ofcom that measures need to be taken to ensure that aggregate interference at FSS Satellite receiver remain at acceptable level and fully protect our existing TC operations.</p> <p>Avanti appreciates that Ofcom is investigating solutions to this problem.</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</i></p> <p>Avanti Communications agrees that it is possible to find technical and operational solutions that enable new services while protecting the benefits provided by Avanti’s TT&C uplinks.</p> <p>Avanti believes that with appropriate protection measures, including aggregate EIRP limits from mobile and Wi-Fi users, coexistence between the hybrid sharing scheme proposed by Ofcom and FSS TT&C uplinks could be possible.</p> <p>Avanti fully expects that it will have the opportunity to contribute to developing these solutions.</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></p> <p>N/A</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? – N</i></p> <p>N/A</p>

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