Your response

Question	Your response
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?	*Is this response confidential? – N* TalkTalk supports the principle of efficient spectrum sharing between mobile outdoors and Wi-Fi indoors. The nature of the upper 6GHz band lends itself well to hybrid sharing.
Question 2(a): Hybrid sharing could mean that the upper 6 GHz ban 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. 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?	*Is this response confidential? – N* No comment
Question 2(b): Similarly, what are the priorities from the point of view of Wi-Fi deployments?	*Is this response confidential? – N* Wi-Fi in the busiest, most congested areas, such as MDUs in high density urban areas, has the greatest need for additional spectrum. It is reasonable to conclude that these areas have the highest demand for both Wi-Fi and mobile data. Due to the small size of Wi-Fi 'cells' (coverage from a single access Point), Wi-Fi is much more spectrally efficient than mobile, and therefore in these dense urban areas, Wi-Fi use should be prioritised above mobile, through efficient mechanisms.
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?	*Is this response confidential? – N* TalkTalk supports approaches to hybrid sharing that are both efficient and internationally harmonised.

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?	*Is this response confidential? – N* TalkTalk supports the use of sensing in Wi-Fi access points as the primary (or sole) mechanism to enable hybrid sharing. Sensing is already used in DFS, itself a form of hybrid sharing.
Question 5: What mechanisms could potentially enable device-to-device connectivity?	*Is this response confidential? – N* No comment
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?	*Is this response confidential? – N* No comment
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?	*Is this response confidential? – N* No comment
Question 8(a): Assuming the future of the band includes indoor use for Wi-Fi and outdoors use for mobile: How could this be achieved without creating or suffering interference?	*Is this response confidential? – N* The best way to mitigate interference between mobile outdoors and Wi-Fi indoors is to set the maximum permissible power for mobile to be as low as possible, while still permitting outdoor-only mobile use (i.e. not allowing additional power that would be needed for outdoor to indoor mobile penetration)
Question 8(b): Could there be a combination of technical adjustments such as power limits and other mechanisms (including databases or sensing mechanisms)?	*Is this response confidential? – N*
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. 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?	*Is this response confidential? – N* No comment
Question 9(b): What are your views on the initial analysis we have conducted around	*Is this response confidential? – N* No comment

hybrid sharing and coexistence with incumbents?	
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?	*Is this response confidential? – N* No comment
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?	*Is this response confidential? – N* TalkTalk is concerned that hybrid sharing, as discussed, is presented as 'mobile primary', 'Wi-Fi secondary' with Wi-Fi having to adapt to the presence of a mobile network operating in the upper 6GHz band. We would like to avoid the situation where a lightly used mobile cell prevents Wi-Fi from making good use of the upper 6GHz spectrum in that location.
Question 11: Do you have any other comments to make on these proposals or on the future use of the upper 6 GHz band?	*Is this response confidential? – N* Access to the upper 6GHz spectrum for Wi-Fi is required to ensure that customers can fully benefit from additional capabilities of gigabit-capable broadband connections that support greater reliability, lower latency and concurrent use of devices. Therefore, defining appropriate spectrum sharing arrangements to support efficient Wi-Fi use in the band is consistent with Ofcom's strategic goal to support widespread deployment of gigabit-capable broadband networks.

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