

Your response

Question	Your response
Question 1: Do you agree with our proposed set of 88 high density areas for 6 GHz authorisation? If you disagree, please provide your reasoning and evidence.	Confidential? – N In defining the proposed areas for sub-national licensing in the Upper 6 GHz band, Ofcom has relied, as a benchmark, on the “high density” areas used in the recent auction of mmWaves in the UK. Ofcom notes that these areas include 73% of 3 GHz mobile sites, and cover 6.4% of the UK landmass. Ofcom further notes that using a larger mmWave high-density area (originally considered for the mmWave auction but subsequently discarded) increases the percentage of included 3 GHz sites to 77%, covering 7.4% of the UK landmass. Ofcom then states that this is a “a reasonable increase in the proportion of 3 GHz mobile sites covered by the high-density area definition, while still keeping the overall geographic coverage of the high-density areas low”. We observe that Ofcom wishes to ensure that the size of the high-density areas is low in order to a) allow other uses such as WAS/RLAN in the band, and b) avoid clearance of too many fixed links. We have not seen a cost-benefit analysis with this regard, which we consider to be important given that the Upper 6 GHz is intended to be the primary band for the introduction of 5G-Advanced and its evolution to 6G. With regards to (a), we consider that any benefits of WAS/RLAN deployments outside high-density areas would be incremental. With regards to (b), this should only be a consideration if the fixed links are critical in nature. No evidence is presented as to why Ofcom does not simply use the coverage area of the 3 GHz sites as a benchmark. Ofcom states that this is because: “We would not, however, expect 6 GHz deployment to perfectly match 3 GHz locations. In some areas with lower traffic, existing spectrum (including 3 GHz) may already provide sufficient capacity for the foreseeable future, or the incremental benefit of 6 GHz might be too small to justify deployment costs”. It is not possible for stakeholders to judge the accuracy of Ofcom's opinion in the absence of information on the current loading of the mobile cells in the areas in question, or an understanding of how demand for capacity may change in the future, e.g., with the emergence of new use cases. What is certainly true is that operators made commercial decisions to deploy 5G at 3 GHz in these areas, and it is not clear why Ofcom considers that the operators would not deploy 5G-Advanced and 6G in the same areas. Furthermore, in its consultation document Ofcom does not cite the percentage of the UK landmass covered by 5G at

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	3 GHz. It is therefore not possible for stakeholders to perform a direct comparison between Ofcom's proposed high-density area for sub-national licensing in the Upper 6 GHz band, and today's 5G coverage at 3 GHz. We also note that Ofcom has not considered the potential future growth in the coverage footprint of the 3 GHz band. We recommend that Ofcom considers an area for sub-national licensing at Upper 6 GHz which includes the area covered by 5G today in the 3 GHz band, and also accounts for the latter's future growth. This is especially given that the mobile network equipment at Upper 6 GHz have been specifically designed to provide the same coverage as the 3 GHz band. Since 2019, where interest in the 6 GHz band first emerged, the mobile industry has consistently emphasised the value of this band for provision of mobile capacity in a) urban/suburban areas, b) outside urban/suburban areas where there might be localised demand (including in rural areas), and c) along major transport routes. An inspection of the maps provided in the consultation document indicates that the high-density areas proposed by Ofcom for sub-national licensing in the Upper 6 GHz band do not include transport routes. We consider that this is an important oversight, and that the absence of 5G-Advanced and 6G at Upper 6 GHz along motorways, main roads, and busy railway lines will have a substantial detrimental impact on the quality and capability of the UK's future mobile networks in delivering services to user. We recommend that Ofcom revisits its proposed high-density areas for sub-national licensing at Upper 6 GHz with a view to including major transport routes. With regards to mobile deployments outside the high-density areas targeted for sub-national licensing in the Upper 6 GHz band, we note that Ofcom intends to introduce local licensing for use by mobile networks. However, while we understand that under Ofcom's plans mobile networks will operate in high density areas in the Upper 6 GHz band on a prioritised basis in relation to WAS/RLAN, it is not clear whether the same prioritisation will also apply to the local licensing. We note that the mobile use of the Upper 6 GHz band outside high-density areas could imply a large number of local licences throughout the UK's landmass, including for applications such as Gigabit FWA. This should be subject to the type of protection from interference which could only be delivered through operation on a prioritised basis. Accordingly, until such time that the prioritised nature of the local licensing is confirmed, it is not possible for stakeholders to make a judgement as to whether or not Ofcom's proposed combination of sub-national and local

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	licensing would provide sufficient certainty and incentives for operators to invest in 5G-Advanced and 6G deployments in the Upper 6 GHz band. We strongly recommend that Ofcom confirms that both its sub-national and local licensing will be on a prioritised basis with respect to WAS/RLAN, and to seek further feedback from stakeholders prior to making a final decision on the size of the sub-national areas.
Question 2: Do you agree with our proposal to clear fixed links from the Upper 6 GHz band in and around high-density areas, and to leave the band open to new fixed link licence applications outside of high-density areas, subject to coordination?	Confidential? – N
Question 3: Do you agree with the approach we have set out to identify the links which will be affected by the proposed revocation?	Confidential? – N
Question 4: Do you agree with our proposal to remove access to the frequencies 7110–7125 MHz for PMSE use, but to retain the option of allowing users to “borrow” spectrum from the Upper 6 GHz band for occasional major events?	Confidential? – N
Question 5: Do you agree with our proposal to require mobile base stations to protect RAS usage of the band at the levels specified?	Confidential? – N
Question 6: Do you have any comments on how we should manage coexistence between mobile and any other users in the Upper 6 GHz band (i.e., RAS, EESS, SRDs, FSS and MOD use)?	Confidential? – N

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Question 7: Do you have any comments on our assessment of the impacts of our proposals (to the extent not covered by previous questions)?	Confidential? – N
Question 8: Do you have any comments on our Equality impact assessment?	Confidential? – N
Question 9: Do you have any comments on our Welsh Language impact assessment?	Confidential? – N