Your response

Question	Your response
Question 1: (Section 2) Do you have any comments on our assessment of potential use cases, demand and deployment strategies for new uses of mmWave spectrum?	*Is this response confidential? – No* Eutelsat would like to thank Ofcom for sharing its proposal to enable the use of mmWave spectrum for new uses and for giving us the opportunity to express our views. We especially appreciate that Ofcom clearly states in the consultation document that the 28 GHz band is not considered as a future mobile band (§2.21). This band is crucial for the existing and future developments of satellite services in the Ka-band to provide among others broadband access and connectivity to earth stations in motion. Eutelsat currently operates in Ka-band its innovative high throughput EUTELSAT KONNECT satellite, covering the United Kingdom to provide high quality broadband services. We will launch this year a new Ka-band satellite, EUTELSAT KONNECT VHTS, to provide very high-speed Internet access throughout Europe, including the United Kingdom, particularly in currently underserved areas, with a service comparable to that of a fibre-optic network in terms of performance and cost. These latest-generation satellites enable all types of users, from consumers to businesses, and governments to enjoy the social and economic opportunities that internet connectivity entails, wherever they are at affordable prices, thus contributing to reducing the digital divide. We would also like to highlight that among the new uses of the mmWave spectrum, outside of mobile services, a growing use of the Q/V band for satellite services is to be expected.

	The Q/V band (37.5-42.5 GHz space-to-earth, 42.5-43.5, 47.2-50.2 and 50.4-52.4 GHz earth-to-space) is key for the future of satellite services, by enabling access to wide bandwidths for the gateways of the forthcoming generation of high and very high throughput satellites, and for user terminals in a future step. The satellite industry is investing significantly in this band to provide in the foreseeable future high speed connectivity services everywhere. We noted that Ofcom is planning to publish a further consultation which will include proposals for the coordination between existing and new users (§1.27, §7.13). We will pay a special attention to this future consultation, as we want to ensure that coexistence between new mobile uses and existing and future satellite uses in the mmWave spectrum is possible. Out-of-band emissions from IMT stations in the 26 GHz band may indeed interfere with the reception of signals transmitted from earth stations to satellites in the 28 GHz band. Eutelsat therefore invites Ofcom to apply the conditions of European Commission Decision (EU) 2019/784 that are part of UK law (§2.10) and those of ITU World Radiocommunication Conference 2019 Resolution 242 to facilitate coexistence between FSS and IMT services in adjacent bands. We also invite Ofcom to continue to follow the discussions and future developments at CEPT and ITU levels on the compatibility between future IMT uses in the 40 GHz band with FSS in the same band (40.5-42.5 GHz space-to-earth, 42.5-43.5 earth-to-space) and in adjacent bands (37.5-40.5 GHz space-to-earth).
Question 2: (Section 2) Do you have any comments on our proposed overall approach to mmWave spectrum (including our aim to make the 26 GHz and 40 GHz bands available for new uses on the same or similar timeframe)?	*Is this response confidential? – No* Deployment of IMT networks in the 26GHz band is at a very nascent stage worldwide, and we are factually not facing a tremendous rise in operators' expectations nor regulators' move in setting the conditions to use this band. Market

	requirements and concretization in the 26 GHz band must be demonstrated first to confirm forecasts. A very recent and comprehensive report from 5G Observatory[1], supported by European Commission, highlights a lack of demand for 26GHz bands and finds that "their popularity has now waned". Ofcom also convenes in §2.7 that "the commercial development of mmWave spectrum for new uses is still at a relatively early stage worldwide". Eutelsat concurs with these observations and we therefore believe that the 26 GHz band should be largely sufficient, if not excessive, to accommodate current and future demand for new mobile uses as presented in this consultation, meaning the 40 GHz band might not be necessary on the short- to mid-term, if not at all. We would like to recommend making available only the 26 GHz band at this stage and wait for the auction outcome and actual deployment and usage of this frequency band before envisaging allocating more band for such mobile uses. And only at a later stage reconsider if the demand is sufficient enough to justify the opening of the 40 GHz band for new mobile uses. Moreover, the CEPT has not yet definitely concluded on the conditions to open the 40 GHz frequency band for IMT and the conditions of coexistence with other services in the band and adjacent bands. Taking this into consideration, we would like to further recommend waiting before making the 40 GHz band available for new mobile uses in the United Kingdom, especially as it could have an impact on developing satellite activities in the band and adjacent band.
Question 3: (Section 3) Do you agree with our approach of specifying high and low density areas in the UK, and authorising new uses differently in those areas?	*Is this response confidential? – Yes / No (delete as appropriate)*

[1] https://5gobservatory.eu/26-ghz-holds-back-achievement-of-eu-5g-goals/

Question 4: (Section 3) Do you agree with our overall authorisation approach in high density areas for the 26 GHz band (i.e. to grant Shared Access licences on a first come, first served basis for the bottom 850 MHz of the 26 GHz band, (24.25-25.1 GHz), and to auction citywide licences for the rest of the 26 GHz band (25.1-27.5 GHz))?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 5: (Section 3) Do you agree with our overall authorisation approach in low density areas for the 26 GHz band (i.e. to grant Shared Access licences on a first come, first served basis)?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 6: (Section 3) Do you agree with adopting a similar approach to authorising the 40 GHz band as our proposals for the 26 GHz band, if we were to decide to re-allocate the 40 GHz band?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 7: (Section 4) Do you agree with our proposed methodology for identifying and defining high density areas?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 8: (Section 4) Do you agree with our proposed cut-off point of 40 high density areas?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 9: (Section 5) Do you agree with our proposal to clear the fixed links in and around high density areas from the 26 GHz band?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 10: (Section 5, Annex 8) Do you agree with our estimates of the cost of migrating fixed links into alternative spectrum bands?	*Is this response confidential? – Yes / No (delete as appropriate)*

Question 11: (Section 6) Do you agree with the proposed approaches we have outlined to manage coexistence between new 5G users and the different existing users in the 26 GHz band? In particular, do you have any views on our proposals to limit future satellite earth stations in this band to low density areas only, and to end access to this band for PMSE users with five years' notice?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 12:(Section 7) Do you agree with our initial assessment on which option for enabling the 40 GHz band for new uses would best achieve our objectives?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 13: (Section 7, Annex 8) Do you agree with our analysis of the impact on existing 40 GHz licensees, including our estimates of the cost of moving fixed links under the options involving revocation (options 2, 3 and 4)?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 14: (Section 8) Do you have any comments on our high-level Shared Access proposals (including technical and non-technical licence conditions and proposed approach to setting fees)?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 15: (Section 8) Do you agree with the overall approach we have set out to coordination and coexistence between new Shared Access users in the 26 GHz band and existing users?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 16: (Section 9) Do you have any comments on our initial thinking in relation to auction design?	*Is this response confidential? – Yes / No (delete as appropriate)*
Question 17: (Section 10) Do you have any comments on the licence duration options we have considered in this section for new licences for the 26 GHz and 40 GHz bands that we would auction?	*Is this response confidential? – Yes / No (delete as appropriate)*

Question 18: (Section 11) Do you agree with our assessment of potential competition concerns and that it may be appropriate to impose a competition measure such as a 'precautionary cap'?	*Is this response confidential? – Yes / No (delete as appropriate)*

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