Your response

Question	Your response
Do you have any comments on our analysis of the current use of spectrum bands in the frequency range 100-200 GHz, or the potential future use of these frequencies? Do you have any comments on current or future use of the specific bands 116-122 GHz, 174.8-182 GHz and 185-190 GHz?	Confidential? – N Facebook's mission is to give people the power to build community and bring the world closer together. And connecting people is a critical first step in executing this mission. Connecting people takes a mix of technical solutions. To meet access and backhaul needs in urban and suburban areas, Facebook developed Terra-graph, a low-cost high-throughput (multi-giga-bit) multi-node mesh wireless network that can provide fiber-like speeds wirelessly at lower up-front cost.(See https://terragraph.com/). Facebook agrees with Ofcom that Extremely High Frequency (EHF) spectrum in the 100-200 GHz band has the potential to develop new innovative services and applications. In particular, EHF spectrum has the potential to be used for wireless access and backhaul. We believe that EHF spectrum bands are a viable option for next generation millimetre wave Fixed Wireless Access (FWA) and Wireless Backhaul (WBH) systems like Terragraph. The propagation characteristics in EHF spectrum in the 100-200 GHz range are similar to that in the 60 GHz band (which Terragraph is designed for). Moreover, the existence of commercially available radio-frequency integrated circuits (RFICs) would drive adoption of FWA systems in EHF spectrum. Additionally, the potential for large blocks of EHF spectrum would allow for a wide range of use cases and licensing solutions to utilize the spectrum.
Are there any further bands above 100 GHz which you think Ofcom should consider making available on a technology and service neutral basis? Which benefits might be realised from enabling access to further bands?	Confidential? – Y / N No comments

Do you have any comments on the approach we have used to assess the potential effect of our proposals on EESS?	Confidential? – Y / N No comments
Do you have any comments on our proposals to authorise devices to operate on a licence-exempt basis in the 116-122 GHz, 174.8-182 GHz and 185-190 GHz bands?	Confidential? – N We support the use of license-exempt or lightly licensed frameworks in EHF spectrum bands. There is less potential for interference in EHF spectrum due to its propagation characteristics, which lead to more absorption. Due to these characteristics, millimetre wave FWA and WBH systems in EHF would also have narrower beams than current systems, which would further decrease the potential for interference.
Do you have any comments on our proposal to create a 'Spectrum Access: EHF' licence to authorise increased power use in the 116-122 GHz, 174.8-182 GHz and 185-190 GHz bands?	Confidential? – Y / N No comments