

<p>Question 1: What interest do you have in deploying outdoor or standard power Wi-Fi or other licence exempt RLANs in the Lower 6 GHz band? Please provide details of the types of expected deployments.</p>	<p>As the leading provider of Wi-Fi tools, Ekahau appreciates the opportunity to provide comments in response to Ofcom's public consultation questionnaire regarding the 6 GHz band usage in the UK. We believe that unlocking the 6 GHz band for Wi-Fi will be extremely beneficial across the UK. Timely action will ensure the UK remains at the forefront of wireless innovation, enabling businesses and citizens to fully benefit from next-generation connectivity and its associated socioeconomic advantages.</p> <p>Ookla / Ekahau is the global leader in Wi-Fi design, optimization, and troubleshooting tools & solutions, trusted by organizations of every size, including the world's biggest brands and events. Ekahau is part of Ziff Davis, Inc. (NASDAQ: ZD), a leading Internet information and services company consisting of a portfolio of brands that collectively reach more than 240 million people each month. Ekahau is headquartered in Seattle, Washington, US with offices around the globe, including an R&D and Product team based out of Helsinki, Finland.</p> <p>Across different sectors within our customers—including automotive, healthcare, education, hospitality, industrial, public services, retail, transport, and sports—there is strong demand for 6 GHz standard power Wi-Fi to extend existing networks across entire campuses, indoor facilities, and outdoor areas.</p> <p>This expansion would significantly enhance:</p> <ul style="list-style-type: none"> • Capacity (more users and devices) • Performance (higher throughput, lower latency) • Availability and reliability <p>The improved coverage reduces infrastructure costs and supports evolving demands, such as IoT growth and high-density usage during public events.</p> <p>We urge Ofcom to authorize Automated Frequency Coordination (AFC) across the full 6 GHz band (5925–7125 MHz) to enable broad access while protecting incumbent services.</p>
<p>Question 2: Are you interested in providing or developing AFC databases</p>	<p>Not applicable.</p>

for use in the Lower 6 GHz band in the UK?	
Question 3: Do you have any views on the operational considerations of setting up and running AFC databases?	Not applicable.
Question 4: Do you have any views on how we should manage the approval process for AFC databases and, in particular, whether we should rely on parts of the FCC process rather than requiring the whole process to be re-run in the UK?	To keep implementation costs low and speed up the availability of standard power Wi-Fi, we recommend that Ofcom's procedures align as much as possible with established processes like those of the FCC.
Question 5: Please provide any other comments on our proposals for extending access to standard power Wi-Fi and outdoor use, including the overall approach, any details on technical parameters and the running of the AFC databases in this band.	To facilitate rapid implementation and broad interoperability, AFC databases sanctioned by Ofcom must adhere to recognized standards set by organizations such as WInnForum and the Wi-Fi Alliance.
Question 6: Do you have any comments on our proposal to use a “phased” approach, or on the alternative to wait for European harmonisation?	<p>Ookla / Ekahau welcomes and supports Ofcom’s proposal for a phased approach:</p> <p>Phase 1: authorising low power indoor (LPI) Wi-Fi in the whole of the Upper 6 GHz as quickly as possible.</p> <p>Phase 2: authorising mobile once the outcome of European harmonisation is clearer.</p> <p>We urge Ofcom to authorise LPI Wi-Fi in the 6425-7125 MHz band by the end of the current year. Given that existing 6 GHz enterprise Wi-Fi devices can function across the entire 6 GHz spectrum, we request Ofcom to implement procedures to reduce certification or re-certification work for this equipment when updated firmware allowing operation in the upper 6 GHz band is released.</p> <p>Ofcom should not wait for the outcome of the European harmonisation process which might take years to complete and because of its intrinsic uncertainty prevent necessary investments in infrastructure.</p>

<p>Question 7: Do you have any comments on the above suggestion to manage any “legacy” Wi-Fi devices, or alternative suggestions?</p>	<p>Ookla / Ekahau agrees with Ofcom’s assessment that the risk of “legacy” Wi-Fi devices creating interference to mobile devices would be small and manageable. Our enterprise Wi-Fi solutions support centralized management and can be used to configure customers’ Wi-Fi networks’ 6 GHz-capable components to comply with Ofcom’s regulatory requirements.</p>
<p>Question 8: Do you have a view on the amount of spectrum that should be prioritised for Wi-Fi under the prioritised spectrum split option? Please provide evidence for your view.</p>	<p>Our customers are using Wi-Fi to provide wireless broadband connectivity to a large number of users in a relatively small space. To provide a reliable service, we need to deploy a large number of non-overlapping Wi-Fi channels. The lower 6 GHz band gave us an additional 25 channels of 20 MHz width which was a major improvement compared to the times when only the congested 2.4 and 5 GHz bands were available. Owing to the growing usage of video conferencing and social media during the work and different events and increasing symmetrical per-user data rates we need to migrate to channels of 80 MHz width and in this case there are only 6 channels available in the lower 6 GHz band. This is not a sufficient amount of independent channels for the Wi-Fi network of several APs i.e., the full 6 GHz band is needed to utilize 80 MHz width. Hence, the maximum of 400 MHz of additional spectrum Ofcom proposes to allocate to Wi-Fi will be very useful in the short term. However, use of the entire 6 GHz band for large campuses and industrial automation is strongly encouraged and should be a fundamental aspect of the regulation for license-exempt use cases.</p>
<p>Question 9: Do you have any comments on our plan for a “phase 1” when Wi-Fi will be introduced?</p>	<p>Ookla / Ekahau express strong support for Ofcom's proposal to authorize low power indoor (LPI) Wi-Fi operation within the 6425-7125 MHz band during Phase 1. We urge Ofcom to expedite the launch of Phase 1, with a target completion ideally before the close of the current year.</p>
<p>Question 10: One variation on “phase 1” would be to only authorise Wi-Fi in client devices to “seed” the market. Would you have any views on this, or suggestions for other variations?</p>	<p>To be able to use the additional capacity made available by the Upper 6 GHz band, it will be essential that operation of 6 GHz-capable access points is authorised, as well. Therefore, we encourage Ofcom to authorise operation of 6 GHz-capable LPI access points from the beginning, under the same conditions as those applicable for the 5925-6425 MHz band. We believe that</p>

	authorising AP operation will have a stimulating effect on demand and supply of 6 GHz-capable Wi-Fi clients which will result in greater choice and lower prices.
Question 11: Do you have any comments on our plan for a “phase 2” when mobile will be introduced?	We agree with Ofcom’s proposal to wait with introducing mobile to the upper part of the 6 GHz band until the situation of European harmonisation becomes clearer.
Question 12: Do you have a view on the amount of spectrum that should be prioritised for mobile under the prioritised spectrum split option? Please provide evidence for your view.	<p>Currently, we do not see a need for allocating additional spectrum in the Upper 6 GHz band for public mobile networks. While we see the potential for future deployment of private mobile networks, we believe that the 3.8-4.2 GHz band available in the UK is best suited for this purpose. Furthermore, there is ample mobile spectrum in the millimetre wave bands which can be used to provide high-capacity wireless connectivity in congestion hot spots.</p> <p>In Paragraph 2.6 of the consultation document, it is stated that “Both Wi-Fi and mobile have access to roughly 1150 MHz of spectrum”. While this is not factually incorrect, it must be noted that in the case of Wi-Fi, 360 MHz of these 1150 MHz, i.e., approximately 30% of the total amount of spectrum currently available for Wi-Fi in the UK, are subject to DFS restrictions.</p>
Question 13: Do you have any evidence or views about the geographical extent of mobile networks’ likely deployment in Upper 6 GHz?	Given the absence of convincing use cases and spectrum needs assessments for public mobile networks, we find it very difficult to estimate the geographical extent of mobile networks’ deployment in the Upper 6 GHz band. Judging from information about areas of mobile network congestion that was published by Ofcom earlier, it appears that only very small geographical areas, mostly in dense urban environments, are affected.
Question 14: Do you have any comments on our proposed phased approach to authorisation of both Wi-Fi and mobile in the Upper 6 GHz band?	<p>Most of the premises on which our customers operate Wi-Fi networks are located in urban and dense urban areas. To be able to continue operating those Wi-Fi networks which may be using the entire Upper 6 GHz band by the time mobile becomes authorised, we would expect Ofcom to put regulatory tools in place that ensure uninterrupted operation of these networks.</p> <p>In the interest of an efficient use of spectrum, mobile licensees should not be given access to the same spectrum block across all high-density areas. Spectrum</p>

	blocks in each high-density area should be awarded separately.
Question 15: Do you have any comments on our proposal to not include very low power portable devices in the Upper 6 GHz band at this stage, but to keep this under review?	We have no objection to Ofcom's proposal to not include very low power portable devices in the Upper 6 GHz band at this stage.
Question 16: Do you have any comments on our proposal to authorise the use of low-power indoor Wi-Fi access points and client devices to use 6425–7125 MHz?	Ookla / Ekahau strongly supports Ofcom's proposal to authorise the use of low-power indoor Wi-Fi access points and client devices in the 6425–7125 MHz band. We encourage Ofcom to implement this authorisation as quickly as possible, preferably before the end of this year. This would allow us to significantly enhance the functionality and maximize the value of our customers' existing and planned 6 GHz Wi-Fi infrastructure.
Question 17: Do you have any comments on the proposed technical conditions?	Ookla / Ekahau agrees with the proposed technical conditions.
Question 18: Do you have any comments on the proposed VNS draft?	<p>Ookla / Ekahau appreciates Ofcom's proposal for a UK Voluntary National Specification (VNS). We recommend Ofcom actively participate in the work on the 6 GHz standard EN 303 687 conducted by ETSI TC BRAN to ensure that the respective 320 MHz channel plans are aligned. Current Draft EN 303 687 v1.1.6 contains a channel plan which is different from the options shown in Fig. A3.1 of the Ofcom consultation document.</p> <p>Furthermore, we would like to point out that Draft EN 303 687 v1.1.6 contains a provision for the use of dedicated antennas on 6 GHz equipment. A dedicated antenna is defined as an "antenna external to the equipment, using an antenna connector with a cable or a wave-guide and which has been designed or developed for one or more specific types of equipment". We recommend that in a new VNS, Ofcom considers authorizing external antennas for certain enterprise 6 GHz access points.</p>

<p>Question 19: Do you have any suggestions for an appropriate mechanism for enhanced sensing, or comments on the proposed solution above?</p>	<p>Ookla / Ekahau is not opposed to introducing a sensing mechanism if it makes spectrum sharing more efficient, provided that implementation of this mechanism does not increase Wi-Fi product cost, delays the introduction of new products, or reduces system performance.</p> <p>We would like to point out that in bands where dynamic frequency selection (DFS) must be applied, Wi-Fi performance can be negatively affected because of false positives.</p> <p>We believe that reliable alternative approaches may exist that do not require sensing, e.g., geolocation in combination with remote management of Wi-Fi gateways/routers. We recommend Ofcom evaluate these alternatives when entering Phase 2.</p>
<p>Question 20: Do you agree with our proposal to restrict Wi-Fi from transmitting in the 6650-6675.2 MHz band to protect the radio astronomy service? Please provide any technical evidence to support your view.</p>	<p>We acknowledge that radio astronomy is an important service which must be protected. We agree with Ofcom's proposal to restrict Wi-Fi from transmitting in the 6650-6675.2 MHz band during the initial phase of opening the Upper 6 GHz band for Wi-Fi use. At a later stage, Ofcom may want to consider the use of AFC to protect radio astronomy sites whilst enabling use of the 6650-6675.2 MHz band by Wi-Fi where possible.</p>
<p>Question 21: Do you agree with our assessment of Wi-Fi coexistence with existing users of the band? If not, please provide details.</p>	<p>We agree with Ofcom's assessment of Wi-Fi coexistence with existing users of the band. Sharing studies conducted by CEPT and others have demonstrated that Wi-Fi can share the Upper 6 GHz bands with incumbent users.</p>
<p>Question 22: Do you have any evidence about the costs to operators of moving fixed links in and around "high density" areas (such as urban centres) to other bands?</p>	<p>We are not in a position to respond to this question.</p>
<p>Question 23: Do you have any comments on our initial assessment of our likely approach to coexistence between future mobile use and current users in the Upper 6 GHz band?</p>	<p>Concerning the coexistence of mobile with fixed satellite we would like to point out that the mask agreed at WRC-23 was calculated on the basis of a certain number of mobile base stations deployed within a satellite's coverage area. As the deployment assumptions made in current coexistence studies conducted by CEPT are significantly different from those made at WRC-23,</p>

	<p>Ofcom should not include this mask in the technical licence conditions for mobile before verifying its validity under the updated deployment assumptions.</p>
<p>Question 24: Do you have any other comments on our policy proposals or any of the issues raised in this document?</p>	<p>Once again, Ookla / Ekahau would like to express its appreciation for Ofcom's pro-active and pragmatic proposals to authorize outdoor and standard power Wi-Fi plus AFC and to make additional spectrum in the 6 GHz band available for Wi-Fi use.</p> <p>We hope to see positive policy decisions by Ofcom later this year, and we are looking forward to responding to specific consultations when they get published.</p> <p>Wi-Fi is and will remain essential for running our networks reliably and in a cost-effective way, and having the full 6 GHz band available for Wi-Fi will allow our business to remain competitive in the short, medium, and long-term.</p>