Your response

Question	Your response
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.	As the leading industry organization of over 900 member companies, Wi-Fi Alliance enthusiastically supports Ofcom's proposal to enable standard power Wi-Fi in the 5925–6425 MHz band under control of an Automated Frequency Coordination (AFC) system. There is strong market demand for standard power Wi-Fi in the 6 GHz band for a wide range of use cases, both for indoor and outdoor deployments. Key standard power Wi-Fi use cases include: **Enterprise and Industrial Connectivity** • Large-Scale Deployments: Enterprises, universities, hospitals, and manufacturing facilities require robust, high-capacity Wi-Fi networks that provide reliable connectivity across expansive areas. 6 GHz standard power networks extend coverage and enhance performance in these environments. • Mission-Critical Applications: Many industries are deploying latency-sensitive applications such as automation, cloud computing, and real-time monitoring, which demand more and wider Wi-Fi channels and higher power levels for optimal operation. • Private Wireless Networks: Enterprises are increasingly adopting 6 GHz Wi-Fi for private network deployments, providing a cost-effective alternative to licensed spectrum solutions for high-throughput, low-latency applications. These solutions offer significant advantages in terms of equipment affordability, ease of deployment, and operational efficiency, making them an attractive choice for industries requiring reliable, affordable and scalable wireless connectivity. **Public Wi-Fi and Smart City Infrastructure** • Outdoor Wi-Fi Expansion: Municipalities, transportation hubs, and public venues require outdoor Wi-Fi deployments that provide seamless, high-speed connectivity in high-density environments. 6 GHz standard power Wi-Fi networks enable more efficient and cost-effective coverage.

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	• Smart City Applications: Connected infrastructure—including traffic management systems, environmental sensors, and surveillance networks—relies on stable, high-performance wireless networks that can benefit from higher power Wi-Fi in the 6 GHz band. **Fixed Wireless Access (FWA) for Broadband Expansion** • Bridging the Digital Divide: Standard power Wi-Fi in the 6 GHz band can support FWA solutions, particularly in suburban and rural areas where fiber deployments are costly. By enabling longer-range connectivity, FWA can help expand broadband access and reduce deployment costs. • Enterprise-Grade Wireless Backhaul: 6 GHz Wi-Fi standard power networks are well-suited for enterprise and community broadband backhaul applications, particularly where traditional fiber infrastructure is impractical. **Advanced and Emerging Technologies** • Augmented Reality (AR) and Virtual Reality (VR): Standard power 6 GHz Wi-Fi is integral to delivering high-bandwidth, low-latency AR/VR experiences in industries such as healthcare, education, and training. • Industrial Automation and IoT: Manufacturing and logistics sectors rely on Wi-Fi for industrial IoT (IIoT) applications, including robotics, automated guided vehicles (AGVs), and smart warehousing, all of which benefit from standard power operation for extended coverage and reliability. • Wi-Fi 7 and Multi-Gigabit Connectivity: The evolution of Wi-Fi 7 introduces 320 MHz channels and multi-link operation, significantly improving network efficiency and capacity. Standard power access ensures these capabilities can be fully utilized. With leading Wi-Fi vendors investing in 6 GHz technology, a broad range of consumer, enterprise, and industrial 6 GHz standard power devices are entering the market. To date, the FCC has certified over 120 standard power access points, along with several client devices, with more products advancing through the regulatory pipeline. This growing ecosystem underscores the strong industry momentum and the expanding availability of AFC-enabled 6 GHz Wi-Fi solutions. Ensuring standard

Question	Your response
	power access in the UK will enable businesses and consumers to fully utilize these innovations.
Question 2: Are you interested in providing or developing AFC databases for use in the Lower 6 GHz band in the UK?	Yes, Wi-Fi Alliance is ready to support the development and deployment of 6 GHz AFC systems in the UK. Wi-Fi Alliance developed and made publicly available specifications, test plans and training modules to enable implementation of the 6 GHz AFC systems and Wi-Fi Alliance would welcome an opportunity to support Ofcom with additional details. The Wi-Fi industry is actively engaged in commercial AFC system implementation, with eight authorized AFC system operators in the U.S. and three in Canada, alongside additional applicants under review. Given this momentum, we see a clear opportunity to leverage existing expertise and frameworks to accelerate the 6 GHz AFC system(s) implementation and commercialization in the UK. Moreover, with alignment in regulatory approaches as outline in Ofcom's proposal, existing AFC solutions can be adapted to the UK, reducing the burden on stakeholders.
Question 3: Do you have any views on the operational considerations of setting up and running AFC databases?	Collaboration between Ofcom, Wi-Fi Alliance, perspective AFC System operators and Wi-Fi equipment vendors will be critical to ensuring a smooth implementation. Wi-Fi Alliance respectfully urges Ofcom to quickly address the following key considerations so as to ensure the effective operation of AFC systems in the UK: • Regulatory Certainty and Standardization: Clear technical requirements aligned with best practices (e.g., 6 GHz AFC Resources) will facilitate AFC system adoption and implementation. • 6 GHz Incumbent Database Accuracy: The AFC system requires access to up to date 6 GHz incumbent data to prevent interference while maximizing spectrum availability. Ofcom should compel 6 GHz incumbents to provide and maintain accurate information on their network deployments. • Timely Regulatory Framework: A well-defined regulatory framework - including testing and authorization requirements - will be instrumental in helping

Question	Your response
	prospective AFC system operators assess business opportunities.
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?	Wi-Fi Alliance strongly supports leveraging the FCC's AFC system/operator approval process as a foundation for the UK's approach, rather than re-running the entire process independently. The FCC's framework has already undergone extensive technical validation, stakeholder consultations, and regulatory scrutiny, ensuring that approved AFC systems meet stringent interference protection and operational requirements. **Key Advantages of Aligning with the FCC Process:** 1. Accelerated Deployment: Adopting elements of the FCC's approval process would streamline AFC implementation in the UK, reducing time to market and enabling quicker access to standard power Wi-Fi. 2. Harmonization: Many AFC system operators are already authorized in the U.S. and Canada. Aligning with the FCC process ensures compatibility across markets, facilitating equipment availability and reducing barriers to entry. 3. Reduced Regulatory Burden: Requiring AFC operators to undergo a completely new approval process in the UK would increase costs and complexity without necessarily improving frequency access coordination. By recognizing parts of the FCC's process, Ofcom can focus on UK-specific considerations while minimizing duplication. 4. Technical Consistency: The FCC framework establishes a robust methodology for AFC system operation, including database accuracy, interference mitigation, and security requirements. Aligning with these standards will ensure technical consistency and reliability. 5. Industry Readiness: Given that multiple AFC providers are already authorized in the U.S. and Canada, utilizing the FCC's process will encourage faster adoption in the UK, benefiting enterprises, consumers, and AFC system providers.

Question	Your response
	We recommend that Ofcom adopt a streamlined approval process that recognizes AFC systems already authorized by the FCC while allowing for any necessary UK-specific adaptations. This approach would maximize efficiency while ensuring effective spectrum management in the 6 GHz band.
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.	(1) In the 2020 decision to allow indoor-only RLAN (i.e., LPI) devices in the 5925–6425 MHz, Ofcom made a determination to apply 12 dB attenuation to account for the building entry loss (BEL) (see 2020 decision Paragraph A2.56). Wi-Fi Alliance respectfully asks Ofcom to recognize that for the same reasons established in its 2020 decision, BEL should be an input to the AFC predictive propagation model to determine permitted power levels for 6 GHz standard power devices that by their Product Form Factor restrictions (i.e., wired power, no batteries, no weatherized enclosure) can only operate indoors. In this regard, Ofcom may wish to note recent FCC decisions that permitted the AFC systems to adjust their calculations to take into account BEL when standard-power devices are restricted to indoors. (2) The commercial viability of AFC implementations and associated standard power use cases is highly dependent on expanded spectrum access. Given the similarities in incumbent operations between the Lower and Upper 6 GHz bands, and in light of Ofcom's proposed "phased" approach, there is no reason for restricting standard power Wi-Fi solely to the Lower 6 GHz band. Wi-Fi Alliance believes the most beneficial path forward is to enable AFC-controlled standard power operations across the entire 6 GHz band. Importantly, the implementation of AFC in the Upper 6 GHz band would provide Ofcom with even greater oversight and control over standard power devices, enabling near real-time adjustments following Phase 2 decisions.
Question 6: Do you have any comments on our proposal to use a "phased" approach, or on the alternative to wait for European harmonisation?	Wi-Fi Alliance welcomes Ofcom's pragmatic and forward-thinking phased approach to the Upper 6 GHz band, which prioritizes efficient spectrum use while fostering innovation and economic growth.

Question	Your response
	Phase 1: the decision to authorize low-power indoor Wi-Fi access across the entire 6425–7125 MHz band on a licence-exempt basis is a pivotal step that will rapidly and significantly enhance connectivity in the UK. This decision aligns with global trends and ensures that UK consumers and businesses can benefit from the latest generation of Wi-Fi technology, including Wi-Fi 7. By securing early access to the full 5925-7125 MHz for Wi-Fi, Ofcom is positioning the UK as a global leader in digital infrastructure, supporting next-generation applications in healthcare, education, enterprise, and immersive technologies. Also see response to Question 15. Phase 2: Wi-Fi Alliance appreciates Ofcom's initiative to explore shared use between Wi-Fi and commercial mobile services. However, it is crucial that any proposed prioritization mechanisms preserve the integrity, reliability, and utility of Wi-Fi operations. Given Wi-Fi's critical role in providing high-performance connectivity in dense environments—where mobile networks also face congestion—ensuring seamless interoperability and backwards compatibility must be a priority. Wi-Fi Alliance urges Ofcom to engage closely with industry stakeholders in evaluating the technical and economic implications of Phase 2. A transparent and data-driven approach will be essential to ensuring that any co-existence framework maintains the quality of service and consumer experience that Wi-Fi users expect.
Question 7: Do you have any comments on the above suggestion to manage any "legacy" Wi-Fi devices, or alternative suggestions?	Wi-Fi Alliance agrees with Ofcom's assessment that the interference risk posed by Wi-Fi devices deployed in the Upper 6 GHz band before the conclusion of European co-existence studies (i.e., "legacy" Wi-Fi devices) is manageable. Beyond the valid considerations outlined in Consultation Paragraph 5.43, it is also important to recognize that the same contention-based protocol Wi-Fi devices use to avoid interfering with one another can effectively mitigate interference with mobile operations in the Upper 6 GHz band. For instance, the IEEE Wi-Fi specification mandates energy detection at -62 dBm/20 MHz while the ETSI EN 301 893 prescribes -72dBm/20MHz . Moreover, Wi-Fi Alliance members report that real-world imple-

Question	Your response
	mentations achieve even lower sensing thresholds, further strengthening compliance with the IEEE specification and enhancing coexistence with mobile operations. Wi-Fi Alliance advises against a regulatory approach that would mandate "legacy" access points to cease transmission on all or part of the Upper 6 GHz band at some future date (e.g., by the year 2030) (reference Consultation Paragraph 5.45). Granting Wi-Fi access to the upper 6 GHz band on a provisional basis with a potential future shutdown requirement presents significant risks and inefficiencies for consumers, enterprises, and national digital economies for a number of reasons: **1. Regulatory uncertainty would undermine investment and innovation** The Wi-Fi ecosystem, including OEMs, chipset makers, and service providers, requires long-term regulatory certainty to develop and deploy devices. A temporary authorization would discourage investment in products and services leveraging this spectrum. Similarly, enterprises, municipalities, and other large-scale operators deploying Wi-Fi infrastructure would be reluctant to invest in networks that could be rendered obsolete by a future shutdown. **2. Risk of Mass Disruptions to Connectivity** With a forced shut down after 2030, consumers and businesses that depend on Wi-Fi in the upper 6 GHz band will experience sudden loss of connectivity, requiring costly retrofits or replacements. This would be particularly problematic for mission-critical applications, including hospitals, industrial automation, and public Wi-Fi networks, which cannot afford service disruptions. **3. A mandatory switch off would create market fragmentation and complexity** Different regulations (e.g., allowing temporary access in some countries while granting permanent access in others) would complicate product manufacturing, forcing higher costs and longer development cycles. This would be particularly problematic for enterprises operating across multiple countries that need harmonized rules to ensure seamless cross-border Wi-Fi deployments.

Question	Your response
	Wi-Fi Alliance concurs with Ofcom's conclusion (Consultation Paragraph 5.39) that implementing cross-technology signalling through mobile base stations transmitting a Wi-Fi-like signal represents a less burdensome approach. This method offers a pragmatic solution to facilitate coexistence while minimizing disruption to existing deployments.
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.	Wi-Fi Alliance strongly supports prioritizing spectrum for Wi-Fi under the prioritized spectrum split option. Wi-Fi deployments in the enterprise environments, for example, require channel diversity to support high-density deployments, ensure quality of service (QoS), and accommodate a growing number of mission-critical applications. Enterprise Wi-Fi networks—particularly in sectors such as healthcare, education, manufacturing, and large-scale commercial operations—rely on a mix of wide and narrow channels to optimize network efficiency. The availability of 320 MHz, 160 MHz, and 80 MHz channels is crucial for ensuring that enterprise Wi-Fi can deliver: • High-capacity, low-latency connections for real-time applications, such as video conferencing, AR/VR for training, and industrial automation. • Interference mitigation through diverse channel selection, reducing congestion in high-density environments. • Seamless coexistence with legacy and new-generation devices, ensuring smooth transitions to Wi-Fi 7 and beyond. Insufficient spectrum can lead to congestion, degraded performance, and an inability to meet QoS requirements. Prioritizing Wi-Fi spectrum access ensures: • Dedicated, interference-free channels for critical applications. • Better support for multi-user environments, enabling simultaneous high-bandwidth usage across large enterprise networks. • Smoother handoffs and mobility support, critical for roaming users in large facilities, such as corporate campuses and hospitals.

Question	Your response
	Given Wi-Fi's role as the primary connectivity technology, Wi-Fi Alliance advocates for a spectrum strategy that ensures sufficient license-exempt, contiguous spectrum to support Wi-Fi's diverse channel needs and QoS requirements. A balanced approach that prioritizes Wi-Fi spectrum access will maximize economic impact, innovation, and digital transformation.
Question 9: Do you have any comments on our plan for a "phase 1" when Wi-Fi will be introduced?	Wi-Fi Alliance strongly supports Ofcom's intent to authorize Wi-Fi access to the Upper 6 GHz band as early as feasible, ideally before the end of 2025. The urgency of this spectrum access cannot be overstated—demand for high-performance, low-latency Wi-Fi networks is rapidly outpacing available spectrum resources. The current 500 MHz in the Lower 6 GHz band is insufficient for the ongoing Wi-Fi 7 deployments, which require multiple 320 MHz and 160 MHz channels to deliver optimal performance. Delaying access to the Upper 6 GHz band would create unnecessary barriers to technological innovation and economic growth, forcing UK enterprises, industrial facilities, and consumers to depend on fragmented or suboptimal spectrum solutions.
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?	A client-only "seeding" approach falls short of delivering meaningful advanced Wi-Fi connectivity benefits to the UK consumers and enterprises. Wi-Fi Alliance respectfully asks Ofcom to note that, according to ABI Research, by 2025, global shipments of 6 GHz access points will exceed 40 million, while 6 GHz client device shipments will surpass one billion. Without access points operating in the Upper 6 GHz band, client devices alone cannot deliver enhanced performance or QoS, effectively rendering their advanced capabilities useless. Hence, UK consumers and enterprises investing in next-generation Wi-Fi devices would be blocked from using the capabilities they have paid for, putting them at a disadvantage compared to users in markets where full-band 6 GHz Wi-Fi is already authorized. Rather than limiting access to client-only operations, Ofcom should ensure that UK consumers and businesses can fully benefit from the global momentum behind Wi-Fi in the entire 6 GHz band. Ofcom proposed phased ap-

Question	Your response
	proach offers a more effective spectrum policy that enables access points in the Upper-6 GHz, ensuring both broad adoption and benefits while preserving flexibility for future decisions on this important resource.
Question 11: Do you have any comments on our plan for a "phase 2" when mobile will be introduced?	Wi-Fi Alliance agrees with Ofcom's plans to carefully assess the impact on incumbents before setting out detailed proposals on mobile authorization in Phase 2. Given the complexity of spectrum sharing in the Upper 6 GHz band, it is essential to ensure that any future mobile introduction does not disrupt existing services. We also recognize the need to wait until the specific sharing mechanisms are clearer before making firm decisions on mobile authorization. Wi-Fi Alliance remains committed to working with Ofcom to ensure that any future spectrum decisions maximize the benefits for UK consumers and enterprises.
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.	Wi-Fi Alliance agrees with Ofcom plans to consult later with more specific authorisation proposals for the mobile allocation, including confirming the amount of spectrum for mobile under a prioritised spectrum split option (see Consultation Paragraph 5.52). Also, please see response to Question 8.
Question 13: Do you have any evidence or views about the geographical extent of mobile networks' likely deployment in Upper 6 GHz?	Ofcom astutely notes that in their responses to the July 2023 consultation, Ericsson, Three, and Vodafone suggested that the Upper 6 GHz band could achieve similar coverage to the 3.4–3.8 GHz band, provided higher radiated powers are used (see Consultation Paragraph 2.9). However, higher radiated power is precisely the main challenge for ensuring mobile networks' coexistence with the 6 GHz incumbent services—raising significant technical and regulatory concerns. Moreover, the physical characteristics of the Upper 6 GHz band further complicate mobile networks' ability to deliver reliable indoor connectivity. Signal absorption, reflections, and penetration losses at 6 GHz frequencies significantly reduce indoor coverage, limiting the band's effectiveness for traditional mobile deployments. Given these challenges, it remains unclear whether mobile networks in the Upper 6 GHz band can deliver sufficient coverage to achieve commercial viability.

Question	Your response
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?	Wi-Fi Alliance supports Ofcom's phased approach, as it ensures that UK consumers and enterprises can begin to fully leverage next-generation Wi-Fi connectivity without unnecessary delays. At the same time, this approach allows Ofcom sufficient time to thoroughly evaluate mobile networks' performance and coexistence feasibility before considering authorizations in the Upper 6 GHz band.
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?	Wi-Fi Alliance supports Ofcom's proposal to authorize low-power indoor (LPI) Wi-Fi access points and client devices in the 6425–7125 MHz band. Additionally, we emphasize the critical importance of authorizing very low power (VLP) Wi-Fi, which primarily includes battery-powered, small-form-factor, body-worn, automotive or close-proximity devices. In its 2020 decision on VLP devices in the 5925–6425 MHz band, Ofcom appropriately aimed to "enable the development of new, innovative applications." Since then, as the 6 GHz VLP ecosystem has expanded, the demand for access to the Upper 6 GHz band has grown accordingly. Given the similarities in incumbent operations between the Lower and Upper 6 GHz bands, the rationale for VLP coexistence remains just as valid. Notably, VLP devices operate at significantly lower power levels (e.g., 25 mW) and are predominantly used indoors, where their interference potential is far lower than LPI devices. When used outdoors, VLP signals experience further attenuation due to "body loss," and clutter from nearby objects such as the human body or other surfaces. Additionally, transmit power control (TPC) further reduces signal strength, as these devices dynamically adjust power levels to optimize battery efficiency. As with LPI, VLP coexistence with possible mobile operations (Phase 2) can be achieved through the same cross-technology signalling implementation, where mobile base stations transmit a Wi-Fi-like signal for VLP detection and avoidance. Thus, there are no technical reasons to preclude VLP from operating in the Upper 6 GHz band under Phase 1. Importantly, authorizing VLP Wi-Fi in the Upper 6 GHz band will enable UK consumers and enterprises to fully benefit from a rapidly developing 6 GHz VLP device and

Question	Your response
	use case ecosystems while ensuring efficient and responsible spectrum use. We strongly agree with Ofcom's plan to move forward quickly on LPI in the Upper 6 GHz band. We also ask that Ofcom consider allowing VLP operations in the Upper 6 GHz band.
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?	Wi-Fi Alliance strongly supports Ofcom's proposal to authorize the use of LPI Wi-Fi access points and client devices in the 6425–7125 MHz band. This action is well-aligned with policy decisions in other countries, including the U.S., Canada, South Korea, and Saudi Arabia — and reflects the rapid technological advancements shaping the 6 GHz Wi-Fi ecosystem. Enabling LPI Wi-Fi in the Upper 6 GHz band will unlock valuable benefits for the UK's consumers, enterprises, and public services by providing the necessary spectrum for next-generation Wi-Fi connectivity solutions. Furthermore, extensive coexistence studies conducted by CEPT and other regulatory bodies confirm that LPI Wi-Fi can operate without causing harmful interference to incumbent services (see ECC Report 364). Wi-Fi Alliance urges Ofcom to proceed swiftly with this proposal, ensuring that UK stakeholders can fully leverage the advantages of 6 GHz Wi-Fi to drive economic growth and technological progress.
Question 17: Do you have any comments on the proposed technical conditions?	Wi-Fi Alliance supports Ofcom's proposed technical conditions for LPI Wi-Fi access points and client devices in the 6425–7125 MHz band. We strongly emphasize that alignment of LPI Wi-Fi regulations between the Lower 6 GHz (5925–6425 MHz) and Upper 6 GHz (6425–7125 MHz) bands is critically important. Consistency in technical conditions across the full 6 GHz band will ensure seamless interoperability, maximize economies of scale, simplify device certification, and accelerate the 6 GHz Wi-Fi deployments in the UK.
Question 18: Do you have any comments on the proposed VNS draft?	Wi-Fi Alliance appreciates Ofcom's approach introducing a Voluntary National Specification (VNS) guidance as a basis for demonstrating compliance of 6 GHz WAS/RLAN

Question	Your response
	equipment with the technical conditions for operating in the Upper 6 GHz band. Given that the approval of an ETSI harmonized standard for the Upper 6 GHz band may take considerable time—possibly years—the VNS guidance provides a practical and necessary interim solution to facilitate timely deployment of 6 GHz Wi-Fi equipment. Consistent with our responses to previous questions, Wi-Fi Alliance strongly recommends that the VNS scope be expanded to include standard power WAS/RLANs (see response to Question 5(2)). Harmonization of technical conditions between the Lower and Upper 6 GHz bands is essential to enabling a seamless introduction of next-generation Wi-Fi technologies in the UK. Consistent with our response to Question 15, we also support the expansion of the VNS to include VLP devices but defer to Ofcom's desire to move forward more immediately on LPI and standard power operations.
Question 19: Do you have any suggestions for an appropriate mechanism for enhanced sensing, or comments on the proposed solution above?	Please see response to Question 7
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.	Wi-Fi Alliance recognizes the importance of protecting radio astronomy service (RAS) observations in the 6650–6675.2 MHz band and agrees that appropriate measures should be in place to prevent harmful interference. However, we believe that a complete prohibition on all WAS/RLAN transmissions in this frequency range is an unnecessarily restrictive approach. As Ofcom correctly noted (Consultation Paragraph 2.35), RAS observatories are located outside residential and urban areas, where the likelihood of interference from Wi-Fi operations is significantly reduced. Additionally, these observatories are secure facilities that control the installation and operation of radio devices within their premises. Given these factors, it is unlikely that low-power indoor or very low-power Wi-Fi devices—operating at a considerable distance from the observatory's premises with highly attenuated signals—would pose a meaningful risk of interference to RAS operations.

Question	Your response
	For standard power devices, the use of an AFC system will ensure appropriate protection by calculating exclusion zones based on radio line-of-sight distances between the RAS antenna and Wi-Fi access points. This approach effectively mitigates interference while allowing efficient use of spectrum resources. Furthermore, real-world experience demonstrates successful coexistence of WAS/RLAN with RAS in the 6 GHz band. In both the U.S. and Canada, extensive 6 GHz Wi-Fi deployments—including in the 6650–6675.2 MHz range—have not resulted in reported cases of harmful interference to radio astronomy observations. These precedents provide strong evidence that a well-managed coexistence framework can protect RAS without requiring a full transmission ban in this important sub-band. Wi-Fi Alliance urges Ofcom to consider a more proportionate and technically justified approach that preserves spectrum access for Wi-Fi while maintaining necessary protections for RAS.
Question 21: Do you agree with our assessment of Wi-Fi coexistence with existing users of the band? If not, please provide details.	Yes, Wi-Fi Alliance agrees with Ofcom's assessment of Wi-Fi coexistence with existing users of the 6 GHz band. Extensive studies conducted as part of the multi-year CEPT effort have consistently demonstrated that the interference potential of WAS/RLAN operations to incumbent services is very low. In particular, ECC Report 302 and ECC Report 364 provide comprehensive technical analyses confirming that LPI and VLP Wi-Fi can coexist safely with fixed satellite services and fixed service FS operations. This conclusion is further supported by real-world deployments in multiple countries, including the UK's existing RLAN operations in the Lower 6 GHz band. These practical experiences validate the findings of regulatory studies and demonstrate that Ofcom proposed coexistence framework ensures effective spectrum sharing.
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?	Wi-Fi Alliance is not in a position to estimate the cost of relocating 6 GHz fixed networks. However, we wish to emphasize that such relocation entails not only significant expenses for operators—covering equipment upgrades, engineering, and deployment—but also a funda-

Question	Your response
	mental challenge: the availability of alternative spectrum. Ofcom must carefully consider both aspects when assessing the feasibility of repurposing the Upper 6 GHz band for high-power mobile operations. Beyond direct financial costs, the critical issue is identifying suitable replacement ("go to") frequency bands. Fixed service operators require spectrum with comparable propagation characteristics, capacity, and reliability. However, no "free" spectrum exists to seamlessly accommodate these 6 GHz fixed networks relocations without displacing other critical services. Many suitable frequency bands are already heavily utilized, and any reassignments would likely introduce additional coordination challenges, interference risks, and regulatory complexities. Given these constraints, Wi-Fi Alliance urges Ofcom to take a balanced approach that considers both the economic impact and the broader spectrum landscape. Any relocation should be accompanied by a thorough assessment of available spectrum, realistic transition timelines, and appropriate mitigation strategies to minimize disruption to essential services.
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?	Ofcom correctly observes that requirements for coexistence between mobile base stations and receivers on satellites was extensively studied in preparation for WRC-23 and the expected EIRP mask limits for mobile base station were adopted into an international treaty (ITU Radio Regulations). Before proceeding with Phase 2, Wi-Fi Alliance urges Ofcom to confirm with industry stakeholders that commercial 5G deployments in the 6 GHz band will fully comply with these international treaty obligations. Ensuring adherence to regulatory conditions is critical to preventing harmful interference with satellite operations in the geostationary orbit and maintaining the integrity of global spectrum coordination efforts.
Question 24: Do you have any other comments on our policy proposals or any of the issues raised in this document?	Wi-Fi Alliance appreciates Ofcom's comprehensive assessment of the 6 GHz band and its proposals to foster continued innovation and connectivity. We strongly support Ofcom's efforts to enable Wi-Fi access in the Upper 6 GHz band, recognizing the significant economic and technological benefits this will bring to the UK.