Your response

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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 described in greater detail below, Federated Wireless is an Automated Frequency Coordination (AFC) system operator in the United States and Canada. Our comments herein will focus on our role in managing shared spectrum access rather than on our use of wireless broadband technologies.
Question 2: Are you interested in providing or developing AFC databases for use in the Lower 6 GHz band in the UK?	Yes. Federated Wireless is actively interested in providing and operating an AFC system in the United Kingdom. We have already developed a fully operational AFC platform that was officially certified by the U.S. Federal Communications Commission (FCC) in February 2024 and by Innovation, Science and Economic Development in Canada (ISED) in April of 2025. Our system has been commercially deployed in partnership with major enterprise Wi-Fi OEMs, including Cisco and HPE Aruba, and is currently supporting both standard power and outdoor Wi-Fi 6E and Wi-Fi 7 deployments in the U.S. and Canadian markets. These collaborations represent more than half of the global enterprise access point market, and they underscore the maturity and scalability of our AFC solution. Federated Wireless has a proven track record of delivering advanced spectrum management capabilities at national scale. As a pioneer in dynamic spectrum sharing, we were one of the first companies certified by the FCC to operate a Spectrum Access System (SAS) for the 3.5 GHz Citizens Broadband Radio Service (CBRS), where we currently manage over 240,000 CBRS radio node devices with zero reported interference to incumbent federal or commercial systems. Our AFC system builds directly on this foundation, designed to enable higher power unlicensed operations in the 6 GHz band while safeguarding incumbent users such as fixed microwave and satellite services. In addition to our U.S. and Canadian deployments, we are deeply committed to — and have a proven track record of — supporting spectrum innovation in the United Kingdom. Federated Wireless has been an active participant in U.K. government-led spectrum management innovation initiatives, including:

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	• **The DSIT Spectrum Sandbox initiative**, where we joined a £1.4M project led by Queen Mary University of London to prototype a centralized Dynamic Spectrum Access (DSA) system for Local and Shared Access Licenses (LAL/SAL). Our contributions included extending our cloud-based spectrum management platform to integrate real-time RAN-based sensing from operational 5G gNodeBs, enabling a "Coordinated Sense and Avoid" mechanism. This system was designed to decouple licensing from frequency assignment, offering a scalable and adaptive architecture for future spectrum governance. • **The DCMS 5G New Thinking programme**, where Federated Wireless led Workstream 3 and developed the SAL Spectrum Inquiry Tool. This digital tool automated license feasibility analysis using public data, significantly reducing the time and complexity of spectrum access for temporary and permanent wireless deployments. The project's outcomes supported U.K. government recommendations to modernize and streamline the licensing framework. Together, these U.K.-based engagements reflect our ability to adapt and localize our technology platforms to meet diverse regulatory and market needs. They also demonstrate our longstanding partnership with the U.K. spectrum and wireless ecosystem (e.g., government, academia, and commercial stakeholders). As Ofcom advances its plans to enable AFC-controlled access to the 6 GHz band, Federated Wireless is well-positioned to contribute technical expertise, operational lessons learned, and a mature, field-tested AFC platform. We are committed to supporting Ofcom in developing a regulatory framework that promotes secure, efficient, and scalable spectrum sharing — delivering real benefits to consumers, enterprises, and incumbent users across the United Kingdom. We look forward to deepening our engagement with Ofcom and industry partners to help ensure a successful and future-ready AFC implementation in the United Kingdom.

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Question 3: Do you have any views on the operational considerations of setting up and running AFC databases?	Federated Wireless strongly encourages Ofcom to adopt a pragmatic and globally aligned approach to AFC regulations and system approval. Leveraging key components of the FCC's well-established AFC technical requirements and certification process will significantly reduce time-to-market, foster international harmonization, and lower the burden on both regulators and AFC providers. This alignment will support economies of scale for AFC providers and device manufacturers by avoiding fragmented, country-specific implementations that increase complexity and cost. Wherever feasible, Ofcom should reference or adopt existing technical standards and certification processes — particularly those developed by the FCC, ISED Canada, and international standards bodies (e.g., the Wi-Fi Alliance and Wireless Innovation Forum) — rather than creating bespoke requirements. This includes reuse of defined data exchange protocols, certification test procedures, protection methodologies, and device-AFC communication frameworks. By doing so, Ofcom can accelerate U.K. market access while maintaining a robust protection framework for incumbent services. Ofcom should also authorize multiple AFC operators, rather than limiting the market to a single provider. A multi-operator model promotes innovation, enhances competition, and mitigates risks associated with reliance on a single point of service. Federated Wireless' experience in the United States and Canada has demonstrated that multiple AFCs can operate effectively and independently under a common set of rules, with each system responsible for ensuring compliance and protection of incumbents without the need for inter-system coordination. In terms of deployment, we urge Ofcom to allow maximum flexibility regarding localization requirements. AFC systems are inherently cloud-native software platforms, capable of operating globally distributed instances while ensuring real-time responsiveness and regulatory compliance. Ofcom should avoid imposing restrictive requirements around the physical hosting location of the AFC instance (e.g., requiring hosting in the United Kingdom), the nationality or residency of support personnel, or lo-

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	calized infrastructure unless clearly necessary for national security or data sovereignty purposes. Instead, Ofcom should focus on the operational and security outcomes — such as system uptime, data protection, and incident response time — rather than prescribing the architectural implementation. The successful operation of AFC systems in the United Kingdom will ultimately depend on several foundational elements: • **Reliable Incumbent Data**: Ofcom must ensure that the incumbent database is accurate, complete, and regularly updated. This includes key parameters such as transmitter location, antenna characteristics, and channelization. Standardized Application Programming Interfaces (APIs) are essential to enable efficient, automated synchronization with AFC platforms. • **Environmental and Propagation Data**: AFC systems require standardized, high-resolution access to terrain models, building data, and clutter information to perform accurate propagation modelling. Publishing these datasets in standardized formats will ensure consistency and accuracy across AFC implementations. • **Efficient Interference Mitigation Process**: A clearly defined, multi-step process for reporting, investigating, and resolving interference is critical. AFC systems must be able to interface with Ofcom and impacted licensees while respecting user privacy and system integrity. • **Certification and Re-Certification Framework**: Software-driven AFC systems may evolve over time. Ofcom should establish a flexible yet rigorous certification and re-certification process — like that used by the FCC — to accommodate updates while ensuring continuous compliance. • **Interoperability and Geo-Location Accuracy**: Devices must provide accurate horizontal and vertical location information with a high degree of confidence (e.g., 95% confidence intervals). Supporting professional installation may be necessary for some fixed or directional equipment to ensure compliance with location accuracy and antenna pattern reporting requirements. In summary, by embracing existing international frameworks, supporting multiple AFC operators, and enabling

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	operational flexibility, Ofcom can foster a vibrant, innovative, and interoperable AFC ecosystem in the United Kingdom—while maintaining robust protections for incumbent users and unlocking the full potential of the 6 GHz band.
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?	We recommend that Ofcom establish a "trusted provider" pathway for AFC systems that have already undergone rigorous regulatory review and certification in other markets such as the United States and Canada. AFC platforms that have successfully demonstrated compliance, interoperability, and performance in these environments should be eligible for a streamlined verification process in the United Kingdom. This would accelerate time to market while maintaining high technical standards. To further reduce duplication of effort, Ofcom could adopt key elements from the FCC's established AFC approval framework, including: • A phased validation process encompassing lab testing and public field trials; • Defined requirements for security, data integrity, and system resilience; and • AFC provider-led implementation based on standardized technical parameters. At the same time, we support adapting this framework to reflect U.K.-specific needs — such as local propagation data, incumbent user characteristics, and language/localization requirements — ensuring that Ofcom's AFC regime is both efficient and contextually appropriate.
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.	Federated Wireless strongly supports Ofcom's proposal to extend access to the Lower 6 GHz band using AFC systems. In addition to our responses above, we recommend: • **Technology Neutrality**: Ofcom should maintain an inclusive framework for both Wi-Fi and other unlicensed technologies to maximize the utility of the band in support of the broadest range of use cases. • **Market Development**: The cost of regionalizing or localizing AFC platforms should be balanced

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	by a predictable regulatory environment and cost recovery opportunities for operators. • **Data Exchange Standards**: To ensure seamless device onboarding and efficient AFC coordination, we recommend the definition of standardized data formats, reporting protocols, and optional vendor-specific fields in AFC-device registration schemas. • **Aggregate vs. Single-Entry Protection**: We support a single-entry protection model to streamline operations, reduce complexity, and enable scalable deployment, consistent with U.S. practice. **Fee Structures**: If Ofcom chooses to impose spectrum usage fees, they should be carefully calibrated to support market competition, ensure the financial sustainability of AFC operations, and avoid creating barriers to entry — particularly for emerging technology vendors and smaller providers. Fee structures must strike a balance between cost recovery and affordability, ensuring that they do not inadvertently discourage innovation or participation in the AFC ecosystem. Alternatively, if Ofcom allows AFC operators to set and charge their own service fees, those operators should have the flexibility to define pricing models that reflect their offerings — such as differentiated service tiers, value-added capabilities, or performance guarantees. In this scenario, Ofcom should adopt a light-touch regulatory approach to fee oversight, focusing on transparency and non-discrimination rather than imposing prescriptive rate-setting. Allowing market forces to determine pricing will encourage competition, drive innovation, and ensure a healthy diversity of AFC solutions aligned with varying user needs. In either case, regulatory intervention in pricing should be limited to addressing demonstrable anti-competitive behavior or market failures, rather than constraining commercially viable business models or innovation in service delivery.

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Question 6: Do you have any comments on our proposal to use a "phased" approach, or on the alternative to wait for European harmonisation?	Federated Wireless supports Ofcom's proposed phased approach. The full band 6 GHz Wi-Fi ecosystem already exists today, and U.K. consumers and enterprises should be given the opportunity to benefit from this spectrum immediately rather than waiting for European harmonization to conclude. We believe the phased approach allows the United Kingdom to begin realizing benefits today while maintaining flexibility for potential IMT introduction, should the European framework evolve to support it. We respectfully suggest that access should not be limited to Low Power Indoor (LPI) devices. Standard Power operations, coordinated via AFC, should also be authorized. AFC offers a scalable, standards-based solution to: 1. Protect incumbent users of the band, 2. Enable prioritized mobile use in future phases, and 3. Support opportunistic, dynamic access for Wi-Fi. This approach has already been validated in the U.S. market and provides a pragmatic path forward for the United Kingdom. As Ofcom considers a phased approach to authorizing both Wi-Fi and mobile use in the Upper 6 GHz band, the AFC offers a practical and proven mechanism to manage dynamic coexistence. AFC can assign frequencies in real time based on device location, propagation conditions, and incumbent protection requirements. This enables Ofcom, for example, to prioritize IMT access in designated geographic areas or sub-bands, while still allowing opportunistic Wi-Fi use. Such an approach avoids the need for costly spectrum reallocation or hardware changes and provides a scalable path to phased, policy-driven access that evolves alongside market and regulatory needs.
Question 7: Do you have any comments on the above suggestion to manage any "legacy" Wi-Fi devices, or alternative suggestions?	While we appreciate Ofcom's consideration of managing legacy devices through firmware updates and periodic connectivity checks, Federated Wireless recommends that AFC be used as the primary mechanism to coordinate spectrum access and ensure coexistence. AFC can protect future IMT deployments while allowing legacy

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	Wi-Fi devices to continue operating safely and effectively, without imposing additional requirements on end users or manufacturers. Enhanced sensing features in future Wi-Fi standards may support coexistence, but the AFC represents a simpler, cost-effective, and proven alternative that avoids regulatory and compliance complexities.
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.	No comment.
Question 9: Do you have any comments on our plan for a "phase 1" when Wi-Fi will be introduced?	We support Ofcom's plan to introduce Wi-Fi in Phase 1. With the AFC in place, there is no technical reason to delay the rollout of Standard Power Wi-Fi operations. Early introduction will allow the United Kingdom to leverage the growing ecosystem of Wi-Fi 6E and Wi-Fi 7 devices, accelerating adoption across home, enterprise, and public venue settings.
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?	We do not support limiting Phase 1 to client-only devices. This would restrict real-world deployment scenarios and delay the benefits of broader connectivity. AFC enables the safe and effective introduction of both access points and clients from the outset. Authorizing only client devices would undercut momentum for commercial Wi-Fi 6E and Wi-Fi 7 rollouts.
Question 11: Do you have any comments on our plan for a "phase 2" when mobile will be introduced?	No comment.
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.	No comment.

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Question 13: Do you have any evidence or views about the geographical extent of mobile networks' likely deployment in Upper 6 GHz?	No comment.
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?	Federated Wireless supports Ofcom's phased approach as a practical and future-ready strategy. This model allows the United Kingdom to benefit immediately from Wi-Fi deployments, while preserving the ability to prioritize IMT use in parts of the band at a later time. The AFC enables this flexibility by managing coexistence dynamically, without requiring significant changes to deployed infrastructure. In short, this phased strategy allows Ofcom to deliver immediate value through Wi-Fi while preserving future optionality for mobile use. It provides the best of both worlds: near-term access and long-term adaptability. We welcome the opportunity to support this approach through our operational experience and field-proven AFC platform.
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?	No comment.
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?	
Question 17: Do you have any comments on the proposed technical conditions?	No comment.
Question 18: Do you have any comments on the proposed VNS draft?	No comment.

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Question 19: Do you have any suggestions for an appropriate mechanism for enhanced sensing, or comments on the proposed solution above?	No comment.
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.	No comment.
Question 21: Do you agree with our assessment of Wi-Fi coexistence with existing users of the band? If not, please provide details.	No comment.
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?	No comment.
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?	No comment.
Question 24: Do you have any other comments on our policy proposals or any of the issues raised in this document?	Federated Wireless strongly supports Ofcom's plans to introduce Standard Power operations in the Lower 6 GHz band, embrace existing international frameworks for AFC management of these devices, support multiple AFC operators, and enable operational flexibility. We also support the use of the AFC to enable Wi-fi access to the Upper 6 GHz band in the immediate future while preserving flexibility to introduce IMT in the future should an ecosystem for the technology develop. By aligning with other countries that have already adopted AFC systems, Ofcom can foster a vibrant, innovative, and interoperable AFC ecosystem in the United Kingdom while maintaining robust protections for incumbent users and unlocking the full potential of the 6 GHz band.