Your response

Introduction

Federated Wireless welcomes the opportunity to comment on Ofcom's proposals to enable AFC systems in the 6 GHz band. Federated Wireless commends Ofcom for initiating a timely and comprehensive consultation on the technical and regulatory aspects needed to enable standard power outdoor operations in the 6 GHz band, while ensuring predictable protection for incumbent services.

Federated Wireless supports Ofcom's goal to improve spectrum efficiency, flexibility, and innovation in a manner that is practical, enforceable, and aligned with international best practices, both in the lower and upper 6 GHz band. AFC is a software-based, database-driven coordination system that can significantly increase the usefulness of the 6 GHz band beyond uncoordinated regimes, while maintaining robust incumbent protections.

Background

Federated Wireless is a leader in shared spectrum management and automated spectrum coordination systems. Federated Wireless is certified by the United States Federal Communications Commission (FCC) to operate a Spectrum Access System (SAS) in the 3.5 GHz Citizens Broadband Radio Service (CBRS) band and an Automated Frequency Coordination (AFC) system in the 6 GHz band. Federated Wireless manages spectrum access for over 240,000 commercial radio devices, supporting mobile operators, fixed wireless providers, utilities, enterprises, and other critical communications users, with a proven track record of protecting protected incumbents.

In addition to operating certified AFC and SAS systems in the United States, Federated Wireless has engaged with regulators and stakeholders internationally on AFC and dynamic spectrum access frameworks, including in Canada, the United Kingdom, Saudi Arabia, and South Africa. These engagements have highlighted several consistent themes: (i) the importance of a reliable incumbent data-base and standardized interfaces; (ii) access to appropriate environmental datasets for propagation modelling; (iii) clear protection methodologies and device compliance requirements; and (iv) a practical accreditation and oversight framework that enables industry-led deployment while maintaining regulatory confidence.

Questions and Answers

Question	Your response
Question 1: Do you agree with our proposed set of 88 high density areas for 6 GHz authorisation? If you disagree, please provide your reasoning and evidence.	Confidential? – No No Comment
Question 2: Do you agree with our proposal to clear fixed links from the Upper 6 GHz band in and around high-density areas, and to leave the band open to new fixed link licence applications outside of high-density areas, subject to coordination?	Confidential? – No No Comment
Question 3: Do you agree with the approach we have set out to identify the links which will be affected by the proposed revocation?	Confidential? – No No comment
Question 4: Do you agree with our proposal to remove access to the frequencies 7110–7125 MHz for PMSE use, but to retain the option of allowing users to "borrow" spectrum from the Upper 6 GHz band for occasional major events?	Confidential? – No FW notes that the AFC platform can generate and impose time-limited, frequency-dependent exclusion zones around PMSE services for major events. We agree with Ofcom that PMSE assignments may be prioritized in channels higher than the 7 GHz band to maximize the frequency separation from potential mobile and higher-power Wi-Fi use. However, we note that AFC operation may flexibly consider this frequency range required to protect PMSE services using the protection criteria defined by Ofcom. Such frequency-dependent geographic restriction is demonstrated by AFC operation in the United States for protection of RAS services.

Question	Your response
Question 5: Do you agree with our proposal to require mobile base stations to protect RAS usage of the band at the levels specified?	Confidential? – No FW has No comment on granting RAS protection right at 6650–6675.2 MHz from mobile users. If such a right is allowed, the AFC architecture may be exploited to enforce protection of RAS usage by mobile base stations. To that end, FW recommends to clearly outlines the parameters that affect the coexistence range required to protect RAS services, including the height of mobile base stations transmit antennas and RAS receive antennas (as noted in FCC 47 CFR §15.407(m) in Unted States).
Question 6: Do you have any comments on how we should manage coexistence between mobile and any other users in the Upper 6 GHz band (i.e., RAS, EESS, SRDs, FSS and MOD use)?	Confidential? – No FW generally agrees with the proposal set forth by OfCom for the coexistence between the mobile and other users in the upper 6 GHz band, including AFC-controlled higher-power Standard Power operations, fixed links, Ministry of Defence (MOD), Satellite, and Short-Range Devices (SRD), Radio Astronomy (RAS) and Programme Making and Special Events (PMSE) ser-vices. However, we recommend the following considerations: • We suggest that Ofcom clarify the coexistence of prioritized mobile operation in this portion of the upper 6 GHz band with AFC-controlled higher-power SPDs. Specifically, Federated Wireless recommends that AFC be used as the primary mechanism for coordinating spectrum access and ensuring coexistence. AFC can protect future mobile deployments while allowing legacy AFC controlled higher-power 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. • FW re-iterates the response provided to Question #5, in terms of coexistence between the mobile users and RAS at 6650-6675.2 MHz frequency range. • For the protection of FSS services, FW agrees with the results of studies in WRC-23, including the

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	masks that provide adequate protection to satellite receivers operating in the band. However, to minimize the negative effects on mobile users, the AFC system may be exploited to protect FSS services in the upper 6 GHz from co-channel and adjacent channel mobile operation, while allowing efficient use of the band by mobile users. This may include imposing different power-dependent exclusion zones for co-channel and adjacent channel operation. • FW has no comment for removing PMSE services from 7110-7125 MHz frequency range. However, for protection of PMSE services In the upper 6 GHz band, when a major event has exceptional demand for spectrum for wireless cameras, and PMSE users borrow spectrum from the upper 6 GHz band, FW proposes to use AFC platform can generate and impose time-limited, frequency-dependent exclusion zones around PMSE services for major events. The proception criteria or the size of exclusion zones may be set by OfCom. Such frequency-dependent geographic restriction is demonstrated by AFC operation in the United States for protection of RAS services.
Question 7: Do you have any comments on our assessment of the impacts of our proposals (to the extent not covered by previous questions)?	Confidential? – No No Comment
Question 8: Do you have any comments on our Equality impact assessment?	Confidential? – No No Comment
Question 9: Do you have any comments on our Welsh Language impact assessment?	Confidential? – No No Comment

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