

ALERT

The FCC Seeks Comment on Proposed Changes to the 3.5 GHz Band Framework

August 20, 2024

The Federal Communications Commission (FCC or Commission) is seeking comment on proposed rule changes intended to improve the Citizens Broadband Radio Service (CBRS) regulatory framework in the 3.55-3.7 GHz band (3.5 GHz band). On August 16, 2024, the Commission released a Notice of Proposed Rulemaking (NPRM) inviting feedback on proposed rule changes aimed at promoting the diversity and growth of innovative deployments throughout the 3.5 GHz band. The 3.5 GHz band licensing framework is the first of its kind, enabling shared spectrum access between incumbent operators (including federal radar systems and grandfathered fixed-satellite service (FSS) operations), and two tiers of non-federal users. Since adopting the shared CBRS framework in 2015, the Commission has worked with the National Telecommunications and Information Administration (NTIA) and other federal stakeholders to develop and implement refinements to expand spectrum access in the band. The NPRM seeks to build upon these efforts, inviting comment on proposals to further enhance the CBRS framework, including various changes to Dynamic Protection Areas (DPAs), Environmental Sensing Capability (ESC) sensors, out-of-band-emissions (OOBE) limit requirements, and more.

In a companion Declaratory Ruling, the Commission clarified that government agencies that manage or hold spectrum rights in the 3.5 GHz band, including NTIA and the Department of Defense (DoD), may access Citizen Broadband Radio Service Device (CBSD) registration information provided to Spectrum Access System (SAS) administrators. The Commission confirmed that such governmental entities are not members of the "general public," and thus may receive specific CBSD registration information without the registrant's

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Telecom, Media & Technology Wireless

consent. Comments on the NPRM will be due 30 days after publication in the Federal Register and reply comments will be due another 30 days thereafter.

The NPRM invites comment on a wide range of potential rule changes intended to improve the FCC's CBRS regulatory framework. A high-level summary of those proposals is provided below.

DPAs. The NTIA and DoD — in coordination with the Commission — have implemented a DPA-based regime for real-time spectrum sharing with federal incumbents. Unlike the static Exclusion Zones that the Commission initially implemented, DPAs represent a more dynamic, tailored means of protecting federal operations while maximizing the availability of 3.5 GHz spectrum. Currently, DPA-enabled SASs are required to protect "activated" DPAs from aggregate interference. DPAs are "activated" when DoD radar systems are using the band, signaling that federal incumbents must be protected. When a DPA is "active," the DPA-enabled SAS must manage frequency and power assignments to ensure that the entire DPA is protected from aggregate interference within the active frequency range (¶ 21). The NPRM builds upon the DPA framework by proposing to adopt detailed definitions for different types of DPAs, recognize DPA Neighborhoods, and make enforcement of DPA-based protections mandatory for all current and future SASs (¶¶ 22-30). The Commission broadly seeks comment on changes or improvements that could be made to enhance the DPA-based framework and improve the ways in which DPA-based protections operate (¶ 30).

Alignment with 3.45 GHz Protections. The NPRM asks whether to revise the rules governing the 3.5 GHz band to better align with the spectrum sharing framework adopted in the adjacent 3.45 GHz band that utilizes a geographic protection model. Under the 3.45 GHz model, Cooperative Planning Areas and Periodic Use Areas are utilized to protect federal operations from harmful interference (¶ 31). The Commission asks whether any efficiencies could be gained by modifying the 3.5 GHz band rules to better align with the 3.45 GHz framework (¶ 32).

ESC Issues. The Commission asks whether to modify any aspects of the ESC sensor requirements based on developments in the competitive environment (¶ 34). For example, should ESC operators be required to make their services available to any certified SAS administrator?

OCONUS and Offshore CBRS Issues. The Commission has issued Priority Access Licenses, certified SAS administrators, and authorized General Authorized Access (GAA) use in Alaska, Hawaii, and several U.S. territories outside of the continental United States (OCONUS). The NPRM notes that ESCs are the primary means of protecting federal operations in and around coastal areas and asks how to overcome the "logistical and economic barriers to ESC development and deployment in OCONUS territories" (¶¶ 35-36). The NPRM also seeks comment on whether CBRS operations should be permitted in offshore areas (e.g., the Gulf of Mexico) in the 3.65-3.7 GHz band segment (¶ 37).

Citizen Broadband Radio Service Devices (CBSDs). The Commission requires CBSDs to be registered with and authorized by a certified SAS. CBSDs are also required to provide received signal strength and other measured parameters to SAS administrators upon request. The NPRM seeks comment on how measured interference metric information collection works in practice (¶ 39). Would additional real-world data about

CBRS operations help SAS administrators more effectively manage spectrum access?

The Commission seeks comment on whether the existing information disclosure rules provide sufficient data for current and prospective users to plan their network deployments and make informed decisions regarding investments in the band (¶ 42). The NPRM also seeks comment on its proposal to require SAS administrators to provide CBSD registration data to NTIA and DoD upon request (¶ 45).

OOBE Limits. The NPRM seeks comment on whether to align the CBRS base station OOBE limits with those adopted in the adjacent 3.7 GHz band (¶ 46). The Commission has adopted a less restrictive OOBE limit for base station and mobile operations of -13 dBm/MHz that is consistent with limits for many other mobile wireless services in the 3.7 GHz band (¶ 47). The Commission notes that recent waiver requests related to OOBE in the 3 GHz services highlight challenges with divergent OOBE cutoffs in the 3 GHz bands for equipment manufacturers and asks whether to revise the CBRS OOBE limits at the upper edge of the 3.5 GHz band (¶ 49).

Base Station (CBSD) and End User Device (UE) Power Levels. The Commission seeks comment on whether to permit higher base station power limits — akin to those allowed in the 3.45 GHz and 3.7 GHz bands — in the 3.5 GHz band by adding one or more higher power CBSD device classes and, if so, the potential effect on inband and adjacent band services (¶ 53). The FCC also invites comment on whether to increase UE power limits from 23 dBm to 26 dBm, thereby aligning UE power levels in the Citizen Broadband Radio Service with 3GPP standards (¶ 55).

SAS Connectivity and Outages. FCC rules require CBSDs to maintain connectivity with their associated SAS so that they can receive, and comply with in 60 seconds or less, incoming commands, including commands to reduce power, move frequency range, or cease transmissions. The Commission, however, has provided a case-by-case waiver of its SAS connectivity rules. For example, the agency granted a conditional waiver to the National Football League to permit continued and uninterrupted operation of its coach-to-coach communications systems under certain circumstances (¶ 58). The NPRM seeks comment on any additional circumstances that may warrant less restrictive application of the SAS connectivity requirements, what factors the Commission should consider in determining whether to relax the requirements, and how federal operators and other incumbent users would be protected if more flexible SAS connectivity rules are adopted (¶¶ 59-61).

Time Division Duplex (TDD) Synchronization. In its 3.45 GHz Second Report and Order, the Commission recognized that TDD synchronization could help avoid harmful interference between services in the 3.45 GHz and 3.5 GHz bands. It therefore adopted rules requiring 3.45 GHz band licensees to respond in good faith to 3.5 GHz band operator requests for information to facilitate cross-service TDD synchronization (¶¶ 62, 64). The FCC now seeks comment on whether to impose a similar condition on 3.5 GHz band operations, "to make sure data sharing occurs on a bilateral basis" (¶ 64). It further requests comment on whether it should pursue rule changes "to encourage TDD synchronization with the adjacent 3.7 GHz band" (¶ 65).

FSS and Grandfathered Wireless Broadband Protection. FCC rules provide protection for grandfathered FSS operators in the 3.5 GHz band and certain FSS earth stations in the lower 3.7-4.2 GHz band (C-band) used for satellite telemetry, tracking, and control (TT&C). Since adoption of the Part 96 rules in 2015, satellite operators have completed Phase II relocation of FSS operations to the upper 4.0-4.2 GHz portion of the band and the transition window for FSS earth stations in the 3.65-3.7 GHz band has closed. The FCC seeks comment on whether it should update and streamline its rules to "limit protection of TT&C sites in the 3.7-4.2 GHz band to those facilities that were specifically identified in the 3.7 GHz Report and Order and subsequent satellite operator submissions" and to delete section 96.21, which established protections for FSS earth stations in the 3.65-3.7 GHz band (¶¶ 68-69).

The Commission similarly proposes to delete rules in Part 90 that are no longer necessary since the transition period for Grandfathered Wireless Broadband Licensees ended in January 2023 (¶¶ 70-71).

Miscellaneous Device Issues. The NPRM also seeks comment on proposals regarding certified professional installation of CBSDs, private networks and low-power indoor facilities, and GAA user coexistence, which are additional topics through which the FCC seeks to improve coordination and enhance commercial deployment in the 3.5 GHz band (¶¶ 72-85).

Alongside its NPRM, the Commission released a Declaratory Ruling to clarify that NTIA and DoD are not members of the "general public" under section 96.55(a)(3) of the Commission's rules (¶ 86). As a result, "NTIA and DoD can access CBSD registration information if either government agency requests such information from any SAS" (¶ 87).

For more information about the NPRM, or if you would like assistance in preparing comments, please contact any of the authors listed on this alert. Wiley's Telecom, Media & Technology practice has a wealth of expertise on spectrum management and regulations, and our team of engineers and attorneys include former government officials that are deeply involved with all aspects of the United States government's spectrum management regime.