

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
The National Football League Request for Waiver) WT Docket No. 21-111
of Section 96.39(c) of the Commission's Rules)
)

ORDER

Adopted: July 9, 2021

Released: July 9, 2021

By the Acting Chief, Wireless Telecommunications Bureau:

I. INTRODUCTION

1. By this Order, the Wireless Telecommunications Bureau ("Bureau") conditionally grants the National Football League's ("NFL" or "Petitioner"), request for a waiver of section 96.39(c)(2) of the Commission's rules governing the Citizens Broadband Radio Service. Petitioner requests the Commission grant conditional waiver relief of section 96.39(c)(2) to allow it to continue to operate its coach-to-coach communications system in the limited circumstance of an Internet outage in NFL stadiums, during NFL football games but after authority to operate within the stadium has been obtained from a Spectrum Access System (SAS). For reasons discussed below, we grant Petitioner's Waiver Request subject to the conditions described herein.

II. BACKGROUND

2. In 2015, the Commission adopted rules for shared commercial use of the 3550-3700 MHz band (3.5 GHz band). The Commission established the Citizens Broadband Radio Service and created a three-tiered access and authorization framework to accommodate shared federal and non-federal use of the band. The three tiers are: Incumbent Access, Priority Access, and General Authorized Access ("GAA"). Under this framework, incumbent operations, including authorized federal users and grandfathered FSS earth stations, make up the Incumbent Access tier and receive protection from harmful interference. The Citizens Broadband Radio Service is then divided into the Priority Access and GAA tiers, each of which is required to operate on a non-interference basis with the Incumbent Access tier. GAA users have no expectation of interference protection and are required to operate on a non-interference basis with respect to Priority Access Licensees. Commercial access to the band is

1 See Request of The National Football League for Partial Waiver of Section 96.39(c) of the Commission's Rules to Permit the Certification and Operation of a Citizens Broadband Radio Service System in Stadiums During NFL Football Games, WT Docket No. 21-111 (filed Feb. 1, 2021) (Waiver Request).

2 47 CFR § 96.39(c).

3 See In the Matter of Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354, Report and Order and Second Further Notice of Proposed Rulemaking, 30 FCC Rcd 3959, 3975, paras. 44-45 (2015) (2015 Report and Order).

4 Id.

5 Id.; see 47 CFR §§ 96.15, 96.17.

6 2015 Report and Order, 30 FCC Rcd at 3975, para. 45; see 47 CFR § 96.35(d).

coordinated by Commission-approved, automated frequency coordinators, known as SASs. All Citizens Broadband Radio Service users must register their base stations and be authorized by an SAS prior to beginning operations. Citizens Broadband Radio Service users must also maintain contact with their associated SAS and cease transmission, move to another frequency range, or change power levels within 60 seconds as instructed by the SAS.⁷

3. On February 1, 2021, the NFL submitted a request seeking a waiver of the SAS communications requirements in section 96.39(c)(2) of the Commission's rules under certain limited circumstances. Specifically, the NFL seeks a waiver to allow for use of their coach-to-coach communication system in NFL stadiums during and prior to NFL football games when Internet service is interrupted or becomes unavailable during or immediately prior to the commencement of a scheduled game, but after the authority to operate the system during that game has been granted by an SAS. Petitioner seeks waiver of this requirement in the interest of providing uninterrupted service to its customers and "in permitting deployment of this new and useful CBRS technology in football stadiums...."⁸

4. On March 29, 2021, the Bureau released a public notice seeking comment on Petitioner's Waiver Request.⁹ The Bureau received one comment and two reply comments, none of which opposed grant of the Waiver Request. In a jointly filed comment, the Open Technology Institute at New America, Charter Communications, Inc., and DISH Network Corporation determined that the "factual circumstances the NFL described in its Petition appear sufficient to avoid the harmful interference to other CBRS operators," but asked the Bureau to "explicitly limit any grant of the NFL's requests to the facts presented" to avoid undermining the 3.5 GHz band framework.¹⁰ In its reply comment, the NFL provided testing results showing that interference to Citizens Broadband Radio Service users outside of any NFL stadium is unlikely due to the unique operating environment inside an NFL stadium.¹¹ In its reply comment, NCTA – The Internet & Television Association (NCTA) suggested that any relief offered to the NFL should be narrowly tailored.¹²

III. DISCUSSION

5. Section 1.925(b)(3) of the Commission's rules states that the Commission may grant a waiver when either (i) "[t]he underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest," or (ii) "[i]n view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative."¹³

6. Here, we find that Petitioner's showing, as conditioned herein, meets the requirements of the first waiver standard set forth in section 1.925 of the Commission's rules. Accordingly, we grant a conditional waiver of section 96.39(c)(2) of the Commission's rules to allow Petitioner to operate its

⁷ 47 CFR § 96.39(c)(2).

⁸ Waiver Request at 2.

⁹ *Wireless Telecommunications Bureau Seeks Comment on the National Football League's Request for Waiver of Section 96.39(c)(2) of the Commission's Rules for the Citizens Broadband Radio Service in the 3.5 GHz Band*, DA 21-369 (WTB Mar. 29, 2021). Comments were due April 8, 2021 and reply comments were due April 15, 2021.

¹⁰ Open Technology Institute at New America, Charter Communications, Inc, and DISH Network Corporation Comments at 1.

¹¹ NFL Comments at 1, 4.

¹² NCTA Comments at 1 (noting that NCTA also encouraged the Commission to consider initiating a rulemaking to address other scenarios where Citizens Broadband Radio Service Devices cannot communicate with an SAS).

¹³ 47 CFR § 1.925(b)(3).

coach-to-coach communications systems without connectivity to an SAS in the event of a localized Internet outage in an NFL stadium during an NFL football game throughout the 2021-22 NFL season. This waiver applies only to the Citizens Broadband Radio Service system used for coach-to-coach communications during, and up to two hours immediately prior to an NFL football game, in the event of a complete Internet outage that prevents the Citizens Broadband Radio Service Devices (CBSDs) that comprise this system from contacting an SAS. In addition, we find that Petitioner must comply with the following conditions to operate its coach-to-coach communications system pursuant to this waiver:

- Petitioner must utilize at least two independent, unaffiliated Internet Service Providers with separate physical connections at each NFL stadium throughout the season;
- Petitioner must have a valid and active authorization from an SAS for its operations at the time of the outage;
- Petitioner must provide the Bureau with a point of contact that will be available to receive and immediately address interference reports from federal incumbent users during NFL games;
- Petitioner must immediately shut down operations if any authorized Incumbent Access or Priority Access tier user reports harmful interference to their operations in the band while the NFL is operating pursuant to this waiver;
- Operations pursuant to this waiver are limited to the 3650-3700 MHz band segment;
- This waiver is limited to localized Internet outages affecting Internet connectivity to equipment within the stadium and does not apply to outages affecting the SAS itself;
- Within 24 hours of any operations pursuant to the waiver, Petitioner must submit a report to the Bureau detailing the circumstances of the outage, including the Internet providers affected, gameday downtime for each provider, and any mitigation efforts undertaken by Petitioner or other associated entities with responsibility for gameday operations or communications (e.g., NFL teams, stadium crews, spectrum managers, etc.) to re-establish connectivity or establish an alternate means of communicating with the SAS.
- Within 30 days of Super Bowl LVI, Petitioner must submit a full report detailing:
 - all Internet Service Providers used for CBSD connectivity at each NFL stadium;
 - gameday downtime for each provider including specific dates and times of any and all outages (including those that do not result in operations pursuant to this waiver);
 - details about any games in which Petitioner operated its coach-to-coach communications system pursuant to this waiver, including the specific dates and times of any such operations;
 - any mitigation efforts undertaken by Petitioner or other associated entities with responsibility for gameday operations or communications (e.g., NFL teams, stadium crews, spectrum managers, etc.) to re-establish connectivity or establish an alternate means of communicating with the SAS in the event if any Internet outage during an NFL game (including those that do not result in operations pursuant to this waiver).
- The waiver is limited to the duration of the 2021-2022 season and expires after Super Bowl LVI (currently scheduled for February 13, 2022).

7. Section 96.39(c) requires that a CBSD be registered with and authorized by an SAS prior to its initial service transmission.¹⁴ The rule further requires that CBSDs provide the SAS with specific operational information and provide any updates to the SAS within 60 seconds of any change to that

¹⁴ 47 CFR § 96.39(c).

information.¹⁵ Section 96.39(c)(2) then requires that a CBSD “must receive and comply with any incoming commands from its associated SAS about any changes to power limits and frequency assignments.”¹⁶ Additionally, CBSDs “must cease transmission, move to another frequency range, or change its power level within 60 seconds as instructed by an SAS.”¹⁷ The purpose of the rule is to ensure operations in the band are properly authorized, prevent interference, and provide for the effective coexistence of all tiers of users operating in the band.¹⁸

8. We find that, as conditioned, Petitioner’s operations are unlikely to cause interference to other Citizens Broadband Radio Service operations or meaningfully impede the SAS’s ability to coordinate operations in the band and, as such, strictly applying the requirements of 96.39(c)(2) would not serve the purpose of the rule. Under the *Report and Order*, the underlying purpose of the rule is to ensure operations in the band are properly authorized and to prevent interference to other authorized users of the band.¹⁹ Petitioner claims that its operations are unlikely to cause interference to other Citizens Broadband Radio Service users—or incumbent operators—because their operations will only occur at low power levels, within NFL stadiums, for a limited amount of time just prior to and during NFL football games. According to the Petitioner, NFL stadiums have “uniquely high level[s] of building attenuation,”²⁰ which further reduces the likelihood of harmful interference to other operations, even those in close proximity to the stadium itself. These assertions were not challenged by any commenter in the record. We believe that the operational parameters and technical conditions associated with the NFL’s system, in concert with the conditions imposed herein, will minimize the chances that Petitioner’s operations will cause harmful interference to other systems operating in the band. Therefore, neither the underlying purpose of the rule nor the public interest would be served by strict application of the requirements of section 96.39(c)(2) in this case.

9. In addition to their technical assessments, Petitioner suggests several conditions designed to narrow the scope of their waiver request and ensure that their operations will not cause harmful interference to other operators. Specifically, Petitioner suggests that the waiver be limited to apply only to its coach-to-coach communication system during NFL football games for the duration of the game and the two hours directly prior to an NFL football game. Furthermore, Petitioner suggests that it employ two independent Internet Service Providers and that application of the waiver is conditioned on outages impacting connectivity between the CBSD and the SAS. Finally, Petitioner will still be required to have a valid and active authorization from an SAS prior to the outage and must shut down operations if there is any interference reported from their operations. We believe that the NFL’s suggested conditions have merit and include modified versions of them in the list of conditions associated with this waiver. As set forth above, we also impose additional conditions to limit the likelihood of harmful interference and impose reporting requirements to gather information on unique edge cases like this one.

¹⁵ *Id.*

¹⁶ 47 CFR § 96.39(c)(2).

¹⁷ *Id.*; the Waiver Request makes repeated reference to the “heartbeat” requirement which was developed as an industry standard by the Wireless Innovation Forum (WinnForum) as a means to comply with 96.39(c) and is not, in itself, a Commission requirement. A heartbeat request is used to ask the SAS if the CBSD can transmit under the parameters it provided in the authorization request. If the SAS approves the heartbeat request in its heartbeat response, the CBSD is authorized to transmit with those parameters until the transmit expiration timer expires. In its heartbeat response, the SAS can authorize, terminate, or suspend the CBSD’s authority to operate within the requested parameters.

¹⁸ 2015 *Report and Order*, 30 FCC Rcd at 4032, para. 233.

¹⁹ 2015 *Report and Order*, 30 FCC Rcd at 4032, para. 233.

²⁰ NFL Comments at 4, 6.

10. We believe that the conditions imposed herein will ensure that the underlying purpose of the rule is served and that the grant of the waiver is in the public interest. We find that due to the extremely limited nature of the waiver, the short length of its applicability, and Petitioner's ongoing compliance with all other Commission rules, there are unique circumstances in favor of granting the requested conditional waiver and that doing so would advance the public interest. First, limiting Petitioner's operations to the 3650-3700 MHz band segment will minimize the risk of interference to federal systems (which operate primarily in the 3550-3650 MHz band) and Priority Access licensees (which are authorized to operate in the 3550-3650 MHz band). The fact that the NFL's coach-to-coach communications systems will be operated at low power, on frequencies that were authorized by an SAS prior to an Internet outage, on a time-limited basis, and solely within NFL stadiums further reduces the likelihood of interference with these, and other, authorized users of the band.

11. Additionally, the scope of the waiver is very limited and applies only when there are localized Internet outages affecting Internet connectivity to equipment within the stadium. This condition, in addition to the requirement that Petitioner utilize at least two independent, unaffiliated Internet Service Providers, ensures that Petitioner must still take steps to mitigate chances of a connectivity issue arising and that the waiver will only be relied upon as a last resort. Further, the time limited nature of the waiver, which expires after Super Bowl LVI, provides assurances that this waiver is not seen as a permanent solution and that Petitioner will explore alternative means of addressing connectivity issues in the future.

12. Finally, we believe that it is in the public interest for the Commission, and the public, to have accurate information regarding the frequency and extent of Internet outages that affect SAS connectivity for Petitioner's coach-to-coach communications systems. Therefore, we require Petitioner to provide detailed information—within 24 hours of any outage—regarding any Internet connectivity issue that trigger operations pursuant to this waiver. We also require Petitioner to submit a comprehensive report at the end of the NFL season with information on the Internet providers used at each NFL stadium, gameday Internet outages experienced during the season, and additional details on any outages that triggered operations pursuant to this waiver. This information will provide valuable information to other users of the 3.5 GHz band which could improve future network planning efforts and facilitate more effective coexistence between different users of the band.²¹

13. Therefore, we find it is in the public interest to conditionally grant Petitioner's request for a waiver of section 96.39(c)(2), on a time-limited basis and subject to the conditions described herein.

IV. ORDERING CLAUSES

14. Accordingly, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. § 154(i), and section 1.925 of the Commission's rules, 47 CFR § 1.925, that the request filed by the National Football League for waiver of section 96.39(c)(2) of the Commission's rules, 47 CFR § 96.39(c)(2), is GRANTED to the extent described, and with the conditions specified, herein.

²¹ 2015 Report and Order, 30 FCC Rcd at 4032, para. 233.

15. This action is taken under delegated authority pursuant to sections 0.131 and 0.331 of the Commission's rules, 47 CFR §§ 0.131 and 0.331.

FEDERAL COMMUNICATIONS COMMISSION

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