



FEDERAL COMMUNICATIONS COMMISSION

[ET Docket No. 19-138; FR ID 212490]

Use of the 5.850-5.925 Band

AGENCY: Federal Communications Commission.

ACTION: Notice.

SUMMARY: In this document, the Federal Communications Commission (Commission) rejects a Petition for Reconsideration and a Petition for Partial Reconsideration of the *First Report and Order* filed by the Alliance for Automotive Innovation (Auto Innovators) and the 5G Automotive Association (5GAA), respectively. In the *First Report and Order*, the Commission repurposed the 5.850-5.895 GHz portion of the 5.850-5.925 GHz (5.9 GHz) band (lower 45 megahertz) from intelligent transportation system (ITS) use to provide more flexible unlicensed use, while continuing to dedicate the 5.895-5.925 GHz portion of the 5.9 GHz band (upper 30 megahertz) for vital ITS applications. It also adopted technical and operating rules to minimize the potential for unlicensed operations in the lower 45 megahertz to cause harmful interference to incumbent 5.9 GHz band services—including federal incumbents and ITS operations. Auto Innovators, through its petition, sought reconsideration of the Commission’s decision to redesignate the lower 45 megahertz for unlicensed use. 5GAA, through its petition, sought reconsideration of the unlicensed device out-of-band emissions (OOBE) limits into the upper 30 megahertz retained for ITS operations. For the reasons discussed below, the Commission denied the petitions and affirmed the Commission’s decision to repurpose spectrum previously designated for ITS services to provide more flexibility for unlicensed device uses to help meet the burgeoning demand for wireless broadband in the United States.

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SUPPLEMENTARY INFORMATION: This is a summary of the Commission’s Order on Reconsideration – Use of the 5.850-5.925 GHz Band, ET Docket No. 19-138; FCC 24-32, adopted March 15, 2024, and released March 18, 2024. The full text of this document is available at:

<https://www.fcc.gov/document/fcc-affirms-repurposing-59-ghz-band-between-wi-fi-and-auto-safety>. The full text of this document is also available for public inspection and copying during regular business hours in the FCC Reference Center, 45 L Street, NE, Washington, DC 20554. Alternative formats are available for people with disabilities (Braille, large print, electronic files, audio format) by sending an email to FCC504@fcc.gov or calling the Commission's Consumer and Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (TTY).

Procedural Matters

Regulatory Flexibility Act Analysis. In this present Order on Reconsideration, the Commission promulgates no additional final rules. Our present action is, therefore, not an RFA matter.

Paperwork Reduction Act. This Order on Reconsideration does not contain any new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law No. 104-13. Thus, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 USC 3506 (c)(4).

Congressional Review Act. The Commission will not send a copy of this Order on Reconsideration to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. § 801(a)(1)(A), because no rule was adopted or amended.

Synopsis

BACKGROUND

In 1999, in consultation with the Department of Transportation (DOT), the Commission designated 75 megahertz of spectrum in the 5.9 GHz band for Dedicated Short Range Communications (DSRC) systems in the ITS radio service, setting forth the rules and protocols for the radio systems designed to enable transportation and vehicle safety-related communications. A subsequent order in 2003 established licensing and service rules for DSRC operations. Under the adopted service rules, DSRC licensees shared the 5.9 GHz band with several other services, including amateur radio service and fixed-satellite service (for uplinks) as well as with federal radiolocation service (radar) systems. When the Commission designated the 5.9 GHz band for ITS, it was expected that the band would support widespread deployment of systems that would improve efficiency and promote safety within the nation's transportation

infrastructure. However, in the time since the Commission designated the 5.9 GHz band for ITS service, DSRC deployment was minimal. Many automotive safety functions originally contemplated for the 5.9 GHz band over 20 years ago—such as alerting drivers to vehicles or other objects, lane-merging alerts, and emergency braking—are being met in other spectrum bands (e.g., 76-81 GHz) or by other technologies like radar, light detection and ranging (LiDAR), cameras, and other sensors.

Given the technological shift for delivering automotive safety functions and the public interest benefits that would be gained by repurposing spectrum lying fallow, the Commission adopted the *First Report and Order*, wherein it removed the lower 45 megahertz from ITS use and adopted rules expanding unlicensed national information infrastructure (U-NII) operations such as Wi-Fi into that spectrum. The Commission made this decision partially because the DSRC services once contemplated for the 5.9 GHz band had not come to fruition in the 20 years since it allocated the spectrum for the ITS service. It concluded that rather than reserving the entire 75 megahertz of the 5.9 GHz band for vehicle-safety features that can be or are already being provided using other spectrum bands or alternative technology, 30 megahertz would be sufficient for ITS licensees to effectively use the spectrum for vehicle safety-related applications. The Commission found unconvincing claims about future plans for advanced DSRC-based ITS services and indicated that the future ITS services were too uncertain or remote to justify retaining the full 75 megahertz of the 5.9 GHz for ITS. Accordingly, the Commission concluded that reserving the entire 5.9 GHz band for possible additional ITS services would not be the most efficient or effective use of that band, nor in the public interest to continue to do so.

The Commission determined that its action modifying all existing ITS authorizations to transition such operations to only the upper 30 megahertz was well within the Commission's statutory authority under 47 U.S.C. 316, section 316 of the Communications Act of 1934, as amended, consistent with prior Commission practice, and furthers the promotion of the public interest, convenience, and necessity. The Commission found that this modification was manifestly in the public interest because it would make room for additional valuable unlicensed use in the lower 45 megahertz of the band, while allowing existing ITS operations sufficient spectrum to continue to provide substantially the same basic vehicular safety services. The Commission also found that its decision to repurpose the lower 45 megahertz to provide more flexible unlicensed use was not in conflict with any role assigned to it by Congress.

In making the lower 45 megahertz available for more flexible unlicensed use, the Commission found that, when added to U-NII spectrum in the adjacent 5.725-5.850 GHz (denoted as U-NII-3) band, the 45 megahertz of spectrum from the 5.850-5.895 GHz (denoted as U-NII-4) band would provide for increased high-throughput broadband applications in spectrum that is a core component of today's unlicensed ecosystem, thereby providing the American public with the most efficient and effective use of this valuable mid band spectrum. At the same time, the Commission recognized the importance of maintaining some spectrum to support ITS applications, even though DSRC had sparsely been deployed and failed to become ubiquitously used for the broad range of traffic safety applications that were originally anticipated in the 5.9 GHz band. The Commission designated the upper 30 megahertz to improve automotive safety through ITS applications, and required that, within one year of the effective date of the First Report and Order, ITS licensees must cease operations on channels in the lower 45 megahertz and move to channels in the upper 30 megahertz. To help enhance the roll-out of ITS services and promote the most efficient and effective use of this ITS spectrum, the Commission updated the associated service rules for vehicular communications in the upper 30 megahertz to transition from the original DSRC protocol adopted in 1999 to a wireless technology-based protocol known as Cellular Vehicle-To-Everything (C-V2X), at the end of a transition period to be determined through the record generated by the FNPRM in this proceeding.

To protect incumbent 5.9 GHz band services, including federal incumbents and ITS operations, from potential harmful interference by unlicensed operations, the Commission imposed stringent power limits and operating requirements on unlicensed devices (i.e., access points, subordinate devices, and client devices) operating in the lower 45 megahertz, restricting unlicensed use of the lower 45 megahertz to indoor locations. In addition, to protect the ITS operations during and after their transition to the upper 30 megahertz, the Commission set OOB limits allowed in the upper 30 megahertz for indoor unlicensed operations in the lower 45 megahertz based on, but not identical to, the previously-affirmed OOB limits for unlicensed operations in the 5.725-5.850 GHz (U-NII-3) band. Since the Commission restricted unlicensed use of the lower 45 megahertz to indoor use only, the Commission took advantage of building attenuation, as well as other factors such as path loss, to increase the OOB limits allowed in the upper 30 megahertz from the indoor unlicensed operations by an additional 20 dB as compared to the 5.725-5.850

GHz (U-NII-3) band OOB limits. The Commission found these OOB limits from indoor unlicensed operations mirror the OOB limits for unlicensed operations in the 5.725-5.850 GHz (U-NII-3) band after accounting for building attenuation. The Commission also permitted a root mean square (RMS) detector, instead of requiring a peak detector, to be used to conduct all 5.9 GHz band unlicensed device OOB measurements. The Commission found that RMS measurement is more appropriate for ensuring that the potential for U-NII devices to cause harmful interference to adjacent-band operations is minimized because RMS measurements represent the continuous power being generated from a device, as opposed to peak power, which may only be reached occasionally and for short periods of time.

DISCUSSION

In response to the *First Report and Order*, Auto Innovators and 5GAA filed petitions for reconsideration on June 2, 2021. 86 FR 37982 (July 19, 2021) (corrected notice). In its Petition for Reconsideration, Auto Innovators asks the Commission to reconsider its designation of the lower 45 megahertz for unlicensed uses and restore that portion of the 5.9 GHz band for ITS. In its Petition for Partial Reconsideration, 5GAA asks the Commission to reduce the OOB limits permitted in the upper 30 megahertz designated for ITS services from indoor unlicensed access points, subordinate devices, and client devices operating in the lower 45 megahertz. The Petitions for Reconsideration were collectively denied in this Order on Reconsideration.

While the reconsideration process remained pending, the Intelligent Transportation Society of America (ITS America) and the American Association of State Highway and Transportation Officials (AASHTO) petitioned the United States Court of Appeals for the D.C. Circuit to vacate the part of the *First Report and Order* repurposing the lower 45 megahertz for unlicensed operations. The Amateur Radio Emergency Data Network (AREDN) filed a separate petition asking the court to vacate the entire *First Report and Order*. As discussed below, many of the arguments presented by the reconsiderations petitioners overlap with the court petitioners' arguments. In *ITS America v. FCC*, the D.C. Circuit rejected each of those arguments and affirmed the Commission's decisions in the *First Report and Order*. 45 F.4th 406 (D.C. Cir. 2022).

Redesignation of the 5.850-5.895 Band for Unlicensed Use

In its Petition for Reconsideration, Auto Innovators asks the Commission to reconsider its decision

to redesignate the lower 45 megahertz for unlicensed uses and to restore the lower 45 megahertz block to the ITS service. Auto Innovators contends the Commission exceeded its legal authority in issuing the First Report and Order “over the objection of DOT [the Department of Transportation]... , particularly in light of Congress’s grant of authority to DOT to administer a nationwide ITS program.” Auto Innovators argues in the alternative that the First Report and Order merits reconsideration because the DOT and Congressional interests under the Biden Administration continue to express support for maintaining the entire 5.9 GHz band for automotive safety applications, as they did under the previous administration. Auto Innovators also claims that the entire 75 megahertz of the 5.9 GHz band is needed to facilitate the future of transportation (e.g., automated driving, 5G technologies, advanced vehicle to everything (V2X) applications).

In *ITS America v. FCC*, the D.C. Circuit considered each of these arguments in upholding the Commission’s First Report and Order. First, the court rejected the arguments that the Commission exceeded its legal authority by repurposing the lower 45 megahertz for unlicensed use. The court recognized that allocating spectrum among competing needs “is a difficult, highly technical task,” that “figuring out how much of the spectrum is needed to support a particular activity is exactly what the FCC does,” and that “the FCC is entitled to great deference when predicting the likelihood of [future] developments.” As the court explained, the 1998 Transportation Equity Act for the 21st Century, Pub. L. No. 105-178, 112 Stat. 107, “did not transfer away from the FCC its broad authority to manage the spectrum related to [ITS],” but instead “simply required the FCC to account for the [DOT]’s views and the needs of [ITS] when it does so,” which is what the Commission did.

Second, the court rejected the argument that the change in administration requires the Commission to revisit its decision. Specifically, the court stated that “the Department of Transportation’s concerns with the FCC’s order are no longer espoused by the Executive Branch” and in fact, “through the Department of Justice, the Executive Branch—which of course includes the Department of Transportation—joined the FCC’s brief defending the FCC’s order.” Finally, the court also upheld the Commission’s conclusion that retaining the upper 30 megahertz for ITS will be adequate to serve transportation safety needs. It agreed with the Commission that “other [non-5.9 GHz] technologies have alleviated the need for all 75 megahertz of the [5.9 GHz band] to remain dedicated to [ITS].” In addition, the court refused to require the

Commission to hold additional spectrum in reserve for “yet-to-arrive technologies” that the Commission found “too uncertain and remote to warrant the further reservation of spectrum.” The Commission affirms its decision to repurpose the lower 45 megahertz for the reasons discussed in the *First Report and Order*, including the cost-benefit analysis therein, because nothing in the petition by Auto Innovators persuades us otherwise. Moreover, the D.C. Circuit Court’s decision makes clear that the decision to repurpose that spectrum was well within the Commission’s authority.

Out-of-Band Emissions Limits Permitted in the 5.895-5.925 GHz Band from Unlicensed Operations in the 5.850-5.895 GHz Band

In its Petition for Partial Reconsideration, 5GAA asks the Commission to reconsider “the unwanted emission limits permitted from new indoor unlicensed access points and client devices operating in the [lower 45 megahertz]” to better protect ITS operations in the upper 30 megahertz. Specifically, 5GAA asks the Commission to protect ITS operating in the upper 30 megahertz by “afford[ing] C-V2X an additional 20 dB of protection from these [5.850-5.895 GHz] U-NII-4 emissions.” 5GAA objects to the Commission’s decision to base the OOBE limits for unlicensed devices operating in the 5.850-5.895 GHz (U-NII-4) band on the existing OOBE limits for unlicensed devices in the 5.725-5.850 GHz (U-NII-3) band, as “the technical realities of [5.850-5.895 GHz] U-NII-4 operations necessitate greater protection levels than afforded from [5.725-5.850 GHz] U-NII-3 operations.” 5GAA rejects the Commission’s assumption of 20 dB building attenuation loss for all indoor access points, contending that “[w]hile many unlicensed access points will experience some building attenuation loss, a 20 dB loss cannot be assumed in every instance.” Further, 5GAA claims the Commission’s choice of RMS measurement, rather than peak measurement, results in an additional 10-20 dB of unwanted emissions into the C-V2X frequencies. 5GAA concludes that, combined, these decisions permit an unwanted emission limit into the upper 30 megahertz that is 30-40 dB more relaxed than the 5.725-5.850 GHz (U-NII-3) band limit. 5GAA asserts that its suggestion to reduce the allowed 5.850-5.895 GHz (U-NII-4) band OOBE limits by 20 dB “would provide necessary protection for critical safety services” in the upper 30 megahertz, while “still provid[ing] for robust indoor unlicensed operations.”

5GAA also contends that the Commission’s choice of acceptable 5.850-5.895 GHz (U-NII-4) band OOBE limits based on the existing OOBE limits for unlicensed devices in the 5.725-5.850 GHz (U-NII-3)

band is arbitrary and capricious as it fails to satisfy the Administrative Procedure Act (5 U.S.C. 551–559) obligation to fully consider the relevant facts underlying its assumptions and articulate a reasoned explanation to support its decision. 5GAA argues that C-V2X will have a “much more robust deployment” than the “thinly deployed” DSRC, while the “heavy use of the [5.850-5.895 GHz] U-NII-4 band will result in longer sustained periods of interference” to the upper 30 megahertz. Therefore, 5GAA claims that the more extensive C-V2X operations warrant greater protections than those provided from 5.725-5.850 GHz (U-NII-3) band operations. 5GAA also contends that the Commission’s choice of the RMS measurement standard is arbitrary and capricious because the First Report and Order offers “no meaningful analysis of whether C-V2X operations will be able to tolerate the additional unwanted emissions that the RMS measurement approach will permit.” 5GAA further states that the Commission does not explain why the RMS measurement technique approved to evaluate the indoor unlicensed operations’ OOB levels “is more suitable for assessing the impact of unwanted emissions on C-V2X services” than the peak measurement approach.

In its Petition, 5GAA incorporates by reference a study submitted with its comments on the FNPRM, referred to here as “5GAA’s Coexistence Analysis.” 5GAA claims this study demonstrates the Commission’s OOB limits adopted in the First Report and Order are detrimental to C-V2X, i.e., that the adopted OOB levels for unlicensed operations “significantly reduce C-V2X’s communications range by more than 50% when compared against 5GAA’s preferred approach.” 5GAA argues that “permitting excessive unwanted emissions could raise concerns about the viability of safety services in the [upper 30 megahertz], delaying or even denying the network effects policymakers and transportation stakeholders hope and expect to achieve.”

5GAA’s Coexistence Analysis does not convince us to reconsider the OOB limits decision for indoor unlicensed operations adopted in the First Report and Order. First, 5GAA’s Coexistence Analysis assumes an average activity factor (also known as duty cycle) of 2 percent for the percentage of time when an individual indoor unlicensed device is transmitting in the lower 45 megahertz, i.e., adjacent to the lower edge of the upper 30 megahertz. In contrast, in the 6 GHz First Report and Order (89 FR 874) (expanding unlicensed operations in 6 GHz U-NII bands, i.e., adjacent to the upper edge of the upper 30 megahertz), the Commission assessed the potential for Low Power Indoor unlicensed devices operating in the 6 GHz

U-NII bands to cause harmful interference and determined that the appropriate activity factor per unlicensed device is only 0.4%. That activity factor was based on measurement data for 5 GHz U-NII routers. Therefore, unlicensed 5.850-5.895 GHz (U-NII-4) band devices operating in the lower 45 megahertz can be assumed to operate with that same activity factor in determining 5.850-5.895 GHz (U-NII-4) devices' potential to cause harmful interference to ITS operations in the upper 30 megahertz. Thus, 5GAA's assumption leads to approximately 7 dB over-estimation in the average duty cycle power per unlicensed device's transmissions over time.

Second, 5GAA's Coexistence Analysis uses a relatively low 20 dBm (100 mW) on-board unit (OBU) transmit power, where under our current rules, it could have used a higher OBU transmit power limit as currently permitted in the 47 CFR 95.3189 OBU technical standards. Section 95.3189 (47 CFR 95.3189) currently requires compliance with the Institute of Electrical and Electronics Engineers (IEEE) 802.11p-2010 standard: Amendment 6: Wireless Access in Vehicular Environments. Under the IEEE standard, OBUs operated by entities other than state and local governments are allowed up to 33 dBm EIRP, i.e., 20 times as strong as 5GAA used in the Coexistence Study. By using 20 dBm in its analysis, 5GAA artificially sets the OBU EIRP at a level that significantly increases the potential for 5.850-5.895 GHz (U-NII-4) band OOB to cause harmful interference to ITS operations in the upper 30 megahertz.

5GAA's claims that while "there may be 20 dB [of building] attenuation in some cases, [] there exist other situations where very little attenuation would lead to harmful interference to C-V2X operations" do not persuade us to reconsider the OOB limits adopted in the First Report and Order. 5GAA concedes that 20 dB of building attenuation as compared to the 5.725-5.850 GHz (U-NII-3) OOB limits is appropriate "in some cases." 5GAA does not take into account other factors the Commission considered that would accommodate cases with less building attenuation, such as the path loss due to the separation distance between indoor unlicensed devices and C-V2X receivers. 5GAA's Coexistence Analysis also fails to adequately consider the reduction in antenna gain caused by the directionality of C-V2X receiving antennas. 5GAA assumes the randomness of peaks and nulls in the real antenna gain patterns of both unlicensed devices and C-V2X devices to have a zero dB average. However, C-V2X antennas are typically horizontal in nature in front of and behind vehicles and positioned to maximize coverage along road surfaces. This orientation generally will provide some measure of isolation between unlicensed devices'

transmissions and OBU receivers and help reduce unlicensed devices' OOB levels received by a C-V2X device in the upper 30 megahertz. Because the antenna patterns and coverage requirements differ between unlicensed and C-V2X operations, the assumption of a zero dB average gain is incorrect. C-V2X transmissions received by an OBU from other OBUs is more likely to occur in or near the main lobe of the OBU receiving antenna, which will result in a higher average gain for the reception of C-V2X transmissions than the zero dB average assumed in 5GAA's Coexistence Analysis. In sum, building attenuation, coupled with attenuation due to path loss and the C-V2X OBU receiving antenna angular discrimination, sufficiently support the Commission's decision that its adopted 5.850-5.895 GHz (U-NII-4) band OOB limits that fall in the upper 30 megahertz will not cause harmful interference to C-V2X operations.

5GAA notes that in *Revision of Part 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, Memorandum Opinion and Order, 81 FR 19896 (2016), the Commission adopted relaxed OOB limits for 5.725-5.850 GHz (U-NII-3) band (which form the basis of the 5.850-5.895 GHz (U-NII-4) band OOB limits adopted in the First Report and Order) to accommodate unlicensed fixed point-to-point antennas in that band; since 5.850-5.895 GHz (U-NII-4) indoor unlicensed access points do not use such antennas, the Commission should not have established even more relaxed 5.850-5.895 GHz (U-NII-4) band OOB limits than those for 5.725-5.850 GHz (U-NII-3). However, in 2016, the Commission chose to provide "a single, consistent OOB requirement for all equipment" that operates in the 5.725-5.850 GHz (U-NII-3) band rather than "apply different OOB requirements based on a variety of situations." As such, 5GAA's distinction between types of unlicensed equipment in this case is inapplicable and thus, the Commission's decision to base OOB limits for the 5.850-5.895 GHz (U-NII-4) band equipment on the OOB limits for the 5.725-5.850 GHz (U-NII-3) band was appropriate.

The Commission disagrees with 5GAA's assertion that RMS measurement of unlicensed devices' OOB power, as opposed to peak measurement, permits more power from these OOB in the adjacent band, resulting in the receipt of an additional 10-20 dB of unwanted OOB on the C-V2X frequencies in the upper 30 megahertz. Measurements of infrequent worst-case peak OOB of short duration are not an accurate or realistic assessment of the potential for a device to cause harmful interference. As the Commission explained in the First Report and Order, instances of peak OOB power in an unlicensed

device's transmitted signal only occur occasionally and are of limited duration; RMS measurement of OOBЕ will provide a more accurate assessment of an unlicensed device's potential to cause harmful interference because RMS measurements represent the continuous power being generated from a device.

The Commission also disagrees with 5GAA's assertion that the Commission "traditionally" uses a peak measurement for assessing 5 GHz U-NII OOBЕ. As a general rule, the Commission establishes OOBЕ measurement procedures based on the technical and operational characteristics of the equipment operating in the specific band under consideration and the design characteristics of equipment used in adjacent-bands. Peak measurements may be required when the Commission determines that peak emissions would have significant interference effects, as was the case for compliance testing of 5.725-5.850 GHz (U-NII-3) band devices' unwanted emissions to protect federal terminal Doppler weather radars in the 5.470-5.725 GHz (denoted as U-NII-2C) band. In contrast, in the 6 GHz Order, the Commission adopted OOBЕ levels based on RMS measurement (as well as other appropriate techniques for measuring average power) to protect ITS operations in the 5.9 GHz band from the OOBЕ of unlicensed operations in the adjacent 5.925-6.425 GHz (denoted as U-NII-5) band. Compliance testing of 5.850-5.895 GHz (U-NII-4) band devices' unwanted emissions to protect ITS operations above the 5.850-5.895 GHz (U-NII-4) band is comparable to compliance testing of 5.925-6.425 GHz (U-NII-5) band devices' unwanted emissions to protect ITS operations below the 5.925-6.425 GHz (U-NII-5) band, and thus, RMS detection is appropriate in the case of measuring 5.850-5.895 GHz (U-NII-4) band OOBЕ levels. Moreover, allowing the flexible RMS measurement technique will help promote shared spectrum technologies and drive greater productivity and efficiency in spectrum usage.

Accounting for the above-noted weaknesses in 5GAA's Coexistence Analysis, as well as considering the restriction on unlicensed use of the lower 45 megahertz to indoor locations and the requirement for RMS measurements for analyzing the potential impact of the adopted unlicensed device OOBЕ limits, the Commission concludes that the indoor unlicensed device OOBЕ limits the Commission adopted in the First Report and Order will sufficiently protect C-V2X communications in the upper 30 megahertz from harmful interference. Consequently, the Commission would not expect that C-V2X operations will experience reduced communications range from unlicensed OOBЕ falling within the ITS band.

In response to 5GAA’s claim that the Commission’s choices of acceptable OOB limits and RMS measurement of OOB levels are arbitrary and capricious, the Commission notes that in *ITS America v. FCC*, the U.S. Court of Appeals for the District of Columbia Circuit determined that the Commission was not acting arbitrarily and capriciously when it implemented “restrictions on unlicensed devices using the lower 45 megahertz—such as emissions limits and indoor-use-only rules—to keep those devices from interfering with intelligent transportation systems in the upper 30 megahertz.” The court reiterated its inclination to “uphold the Commission if it makes a technical judgment that is supported with even a modicum of reasoned analysis, absent highly persuasive evidence to the contrary.” The Commission has explained in detail its technical judgment that the adopted restrictions will minimize the potential for harmful interference to the extent appropriate in this context and 5GAA has not provided highly persuasive evidence to refute the Commission’s judgment. 5GAA’s argument that the Commission was arbitrary and capricious by not increasing OOB protections of C-V2X in anticipation of possible heavier uses of both the lower 45 megahertz by unlicensed operations and the upper 30 megahertz via C-V2X deployment is speculative and similarly fails. Therefore, the Commission rejects 5GAA’s claim that the Commission’s decisions regarding protecting ITS operations in the upper 30 megahertz from unlicensed devices’ OOB are arbitrary and capricious, and the Commission declines to reconsider the indoor unlicensed device OOB limits adopted in the First Report and Order.

ORDERING CLAUSES

Accordingly, IT IS ORDERED that pursuant to 47 CFR 1.429, the Petition for Reconsideration filed on June 2, 2021 by Auto Innovators and the Petition for Partial Reconsideration filed on June 2, 2021 by 5GAA ARE DENIED.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene Dortch,
Secretary.