

**BEFORE THE
DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C.**

In the Matter of)
)
Request for Comments on V2X) Docket No. DOT-OST-2018-0210
Communications)

To: Office of the Secretary

**COMMENTS OF
THE WIRELESS INTERNET SERVICE PROVIDERS ASSOCIATION**

The Wireless Internet Service Providers Association (“WISPA”) hereby comments in response to the Notice of Request for Comments (“RFC”) in the above-captioned proceeding regarding all aspects of connected vehicle technology, referred to as V2X communications.¹ WISPA emphasizes that while the Department of Transportation (“DOT”) and its National Highway Traffic Safety Administration have broad authority to set technical standards for highway safety technology, DOT must necessarily defer to the Federal Communications Commission (“FCC”) on all matters involving the allocation and use of non-federal radiofrequency spectrum, including the sharing of spectrum among multiple types of users operating in the same frequency band.

WISPA represents the interests of wireless Internet service providers (“WISPs”) that provide high-speed fixed wireless broadband services to consumers, businesses, first responders, and community anchor institutions, particularly those in areas of the United States that are unserved or underserved by other fixed broadband providers. WISPA’s members include more

¹ *Notice of Request for Comments: V2X Communications*, 83 Fed. Reg. 66338 (Dec. 26, 2018). Comments were originally due thirty days following release of the RFC, on January 25, 2019; however, on February 13, 2019, DOT published a notice confirming advice provided during the partial government shutdown that comments would be accepted until February 25, 2019. *See Notice of Request for Comments: V2X Communications*, 84 Fed. Reg. 3850 (Feb. 13, 2019).

than 800 WISP operators, as well as equipment manufacturers, distributors and other entities committed to providing affordable and competitive fixed broadband services. WISPs typically use unlicensed spectrum and, where available, licensed and lightly-licensed spectrum (or “shared access” spectrum), to deliver last-mile broadband and voice services to more than four million consumers in areas where other providers have declined to invest. Accordingly, WISPA has a strong interest in advocating for access to spectrum when and where it can be effectively shared with other users on a mutually non-interfering basis. Because WISPA’s members are making significant use of unlicensed spectrum for point-to-multipoint communications in the adjacent 5 GHz U-NII band and licensed spectrum for point-to-point communications in the adjacent 6 GHz band, WISPA is uniquely situated to both understand the necessity to protect existing and planned users from harmful interference and to capitalize on critical opportunities to enable spectrum to be effectively shared for additional unlicensed uses.

Given the nature of its interest in this proceeding, WISPA does not offer extensive comment on which technological approaches may be appropriate for implementation of V2X communications except to note that the outdated practice of mandating a particular technology or spectrum use case, as opposed to adopting more general and flexible operating parameters, is very often self-defeating. Too tightly regulating the terms of spectrum usage frequently results in the spectrum lying fallow for extended periods as technology, market demand and user needs evolve, and distinct equipment options emerge. For example, as the Mercatus Center at George Mason University reiterates in its recent Comments, “there ‘is a significant likelihood that [Dedicated Short Range Communications (“DSRC”), the originally-favored vehicle safety technology] will be eclipsed by competing technologies’” and therefore “DOT should avoid favoring any [newer] V2X technology because the safety benefits are uncertain, the device

market is competitive, and the technology advances rapidly.”² Accordingly, the optimal course is to preserve opportunity for all technologies that can successfully coexist in a given band.

In this regard, WISPA focuses its comments here on the second question posed in the RFC concerning the potential changes to the current spectrum allocation at 5.9 GHz for DSRC.³ In addressing this question, DOT should be mindful of the singular role that the FCC plays in allocating radiofrequency spectrum for non-government use and ensuring maximum spectrum efficiency in allocated bands. Because the 5.9 GHz band is allocated exclusively for non-federal, commercial use,⁴ DOT and other federal agencies do not have any decision-making role in the adoption of rules governing this spectrum.

Moreover, the prospects for successful sharing of the band are very promising. Over the past decade and a half, the FCC consistently has moved toward a more flexible approach to technical standard setting that maximizes the opportunity for compatible uses to share spectrum, often with unlicensed users having access on an opportunistic basis to use spectrum that would otherwise be unused or underused.⁵ This approach gives licensees and unlicensed users the

² Comments of Mercatus Center at George Mason University, Docket No. DOT-OST-2018-0210 (filed Jan. 24, 2019), at 1 & 2. *See also* Comments of the Open Technology Institute at New America, Docket No. DOT-OST-2018-0210 (filed Feb. 22, 2019), at 7 (“While DSRC is an outdated standard, attempts to substitute a specific new technology in its place on an exclusive or preferred basis in the 5.9 GHz band would be equally shortsighted”).

³ *See* 83 Fed. Reg. at 66339 (“If that allocation were to be changed to allow any communication technology for transportation applications, could DSRC and other technologies (e.g., C-V2X, 5G or any future technology) operate in the same spectrum band or even the same channel without interference?”).

⁴ *See* 47 C.F.R. § 2.106.

⁵ *See, e.g., Service Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands*, 27 FCC Rcd 16102,16112 (2012) (“the rules we adopt today represent the Commission’s efforts to make more spectrum available for *terrestrial flexible use*, including for mobile broadband, in the public interest, *without imposing undue restrictions on the use of the spectrum*”)(emphases added); *Service Rules for Advanced Wireless Services H Block - Implementing Section 6401 of the Middle Class Tax Relief and Job Creation Act of 2012 Related to the 1915-1920 MHz and 1995-2000 MHz Bands*, 28 FCC Rcd 9483, 9484 (2013) (“Today we increase the Nation’s supply of spectrum *for flexible-use services*, ... including mobile broadband”)(emphasis added); *Promoting Interoperability Order in the 700 MHz Commercial Spectrum*, 28 FCC Rcd 15122, 15134 (“the Commission *adopted a flexible use approach* to allow for

ability to offer the types services that they choose within a larger framework establishing critical performance requirements. WISPA consistently has been a strong advocate in such proceedings for a balanced spectrum policy that includes a combination of licensed and unlicensed spectrum that can be used for deployment of access to fixed wireless broadband service, without the government mandating a particular technology or use case.⁶

With respect to the 5.9 GHz band specifically, the FCC has an open spectrum re-allocation proceeding that has been ongoing for several years.⁷ In that context, WISPA has joined other stakeholders in seeking access to all or a portion of the 5.9 GHz band for unlicensed operations. As WISPA stated in 2016, the record established before the FCC “overwhelmingly supports the beneficial and continued roll-out of next-generation Wi-Fi and other unlicensed broadband services in the 5 GHz band.”⁸ And as WISPA has more recently emphasized, “[t]he long record of effective sharing among unlicensed devices in the 5 GHz and other unlicensed bands illustrates the ability of unlicensed devices of all types to co-exist.”⁹ WISPA agrees with recent comments by NCTA in the FCC proceeding that because the 5.9 GHz band “has no

fixed and mobile services, along with ‘broadcast and other broadband applications that could include two-way interactive, cellular, and mobile television broadcasting services.’”) (emphasis added); *Reallocation and Service Rules for the 698-746 MHz Spectrum Band*, 17 FCC Rcd 11613, 11615 (2002) (“By taking these steps, we seek to promote the transition to DTV, meet our statutory mandate to reclaim and license this spectrum by competitive bidding, and *enable the flexible use of the Lower 700 MHz Band for a wide range of new services*”)(emphasis added).

⁶ See, e.g., Comments of WISPA, Amendment of the Commission’s Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354 (filed Feb. 20, 2013); Comments of WISPA, GN Docket No. 12-354 (filed Dec. 5, 2013); Comments of WISPA, GN Docket No. 12-354 (filed July 14, 2014). See also Comments of WISPA, Office of Engineering and Technology Requests Information on Use of 1675-1710 MHz Band, ET Docket No. 10-123 (filed Apr. 22, 2011).

⁷ See *Revision of Part 15 of the Commission’s Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band*, ET Docket No. 13-49, Notice of Proposed Rulemaking, 28 FCC Rcd 1769 (2013).

⁸ Comments of WISPA, ET Docket No. 13-49 (filed July 7, 2016), at 2.

⁹ *Ex Parte* Letter from Claude Aiken, President & CEO, WISPA, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 13-49 (dated Oct. 26, 2018), at 2.

substantial incumbent operations,” “redesignation or band-segmentation approaches would allow the FCC to combine the U-NII-3 and U-NII-4 bands to provide the country with a contiguous 160-megahertz channel free from coexistence mechanisms such as low power, indoor restrictions, and database use.”¹⁰

A reassessment of this band is long overdue, as the current allocation reserved for DSRC remains underutilized, and subject to evolving technological developments. The underdevelopment of the band for the originally-mandated DSRC technology has been well-documented in several expert studies conducted in the past few years,¹¹ and stems from, at least in part, the FCC’s unfortunate decision in 1999 to mandate a specific technology and a specific use case. In addition, DOT itself has observed that “[f]uture motor vehicle safety standards will need to be more flexible and responsive, technology-neutral, and performance-oriented to accommodate rapid technological innovation.”¹² Similarly, FCC Commissioner Jessica Rosenworcel recently observed that “[i]n the nearly twenty years since the FCC allocated this spectrum, autonomous and connected vehicles have largely moved beyond dedicated short range

¹⁰ Reply Comments of NCTA—The Internet & Television Association, ET Docket No. 13-49 (filed Dec. 13, 2018), at 13.

¹¹ See, e.g., Diana G. Carew, Nicholas Martin, Marjory S. Blumenthal, Philip Armour, Jesse Lastunen, “The Potential Economic Value of Unlicensed Spectrum in the 5.9 GHz Frequency Band; Insights for Future Spectrum Allocation Policy” (Rand 2018), at 2 & 5; Coleman Bazelon and Lucrezio Figurelli, “The Economic Costs and Benefits of a Federal Mandate that All Light Vehicles Employ 5.9 GHz DSRC Technology” (Brattle Group, May 2016), at 2; Michael Calabrese, “Spectrum Silos to Gigabit Wi-Fi” (New America Foundation, January 2016), at 2 (“More than 15 years after the FCC allocated the band to the auto industry on a co-primary basis, the band mostly lies fallow – even as wireless technologies have flourished as an industry”).

¹² U.S. Department of Transportation, “Automated Vehicles 3.0: Preparing for the Future of Transportation” (Oct. 2018), at 7 (“Automated Vehicles 3.0”), *available at* <https://www.transportation.gov/sites/dot.gov/files/docs/policyinitiatives/automated-vehicles/320711/preparing-future-transportation-automated-vehicle-30.pdf>. See also Comments of the Open Technology Institute at New America, Docket No. DOT-OST-2018-0210 (filed Feb. 22, 2019), at 4 (supporting DOT’s “stated principles in favor of a technology-neutral, forward-thinking and market-driven framework for V2X communications that would not mandate one specific technology”).

communications technology to newer, market-driven alternatives” and accordingly, “[i]t is time to take a fresh look at this band to allow a broader range of uses.”¹³

Given the existence of and impetus behind the FCC’s pending 5.9 GHz FCC proceeding, DOT should communicate directly with the FCC on issues such as interference-protection, re-channelization and interoperability within this band. These agencies should cooperate in pursuit of the beneficial goal of maximizing the use of spectrum for multiple commercial services that are capable of co-existing in the 5 GHz band, including safety services, fixed broadband, Wi-Fi and others. Indeed, it appears that DOT is prepared to take steps in this direction as it has recently expressed its desire both “to preserve the ability for transportation safety applications to function in the 5.9 GHz spectrum” while also “exploring methods for sharing the spectrum with other users.”¹⁴ One means of meeting these twin goals may be limiting exclusive “safety of life” use to a portion of the 5.9 GHz band (to 10 or 20 megahertz) while opening a larger portion of it to broader unlicensed use.¹⁵ Whatever approach ultimately proves optimal for achieving these goals, it is the FCC that must take the lead in establishing the ground rules for use of the 5.9 GHz frequency band. DOT should engage in and cooperate with these efforts.

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For the foregoing reasons, WISPA urges DOT to participate in the FCC rulemaking process with the goals of: (1) ensuring this spectrum is appropriately opened to new uses that are

¹³ Statement of Commissioner Jessica Rosenworcel on the 5.9 GHz Band (rel. Oct. 16, 2018), *available at* <https://docs.fcc.gov/public/attachments/DOC-354588A1.pdf>.

¹⁴ Automated Vehicles 3.0 at 16-17.

¹⁵ *See also* Comments of the Open Technology Institute at New America, Docket No. DOT-OST-2018-0210 (filed Feb. 22, 2019), at 3-4 & 14 (“The Department should determine the number and size of spectrum channels necessary for real-time safety signaling and then defer to the FCC to allocate the appropriate spectrum, while ensuring an optimal use of the 5.9 GHz band”).

compatible with evolving V2X applications and (2) effecting the abandonment of the current DSRC mandate that is required to achieve the first goal.

Respectfully submitted,

**WIRELESS INTERNET SERVICE
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