

**STATEMENT OF
CHAIRMAN AJIT PAI**

Re: *Use of the 5.850-5.925 GHz Band*, ET Docket No. 19-138.

The saga of the 5.9 GHz band brings to the mind of this Chairman of the Board the 1970 song by Chairmen of the Board, *Give Me Just a Little More Time*. In that hit, Chairmen of the Board famously pleaded that, if given just a little bit longer, great things would surely happen (in the case of the song, “our love will surely grow”).

Something similar has been true of those who oppose reform of the 5.9 GHz band. More than 20 years ago, the Commission allocated the 75 megahertz of spectrum from 5.850-5.925 GHz for Intelligent Transportation System (ITS) services and designated Dedicated Short-Range Communications (DSRC) as the technological standard for use in this band. Unfortunately, over two decades later, the FCC, the automobile industry, and most importantly, the American people have little to show for that decision. DSRC-based service has evolved slowly and has not been used in a meaningful way to improve automotive safety. For example, according to the American Association of State Highway and Transportation Officials, only 57 operational DSRC projects have been deployed, including 6,182 DSRC roadside units and 15,506 vehicles equipped with DSRC on-board units. By comparison, there are approximately 274 million registered vehicles in the United States operating across approximately 4.2 million miles of roadways. Just think about it: More than 20 years after the FCC allocated the 5.9 GHz band for DSRC, 99.9943% of the 274 million registered vehicles on the road in the United States still don’t have DSRC on-board units.

For years, whenever it has been pointed out that most 5.9 GHz band spectrum in the United States is laying fallow, DSRC proponents have claimed that widespread deployment of DSRC-based technology was just around the bend. We just need to give it a little more time. Well, we have given DSRC a little more time . . . many, many times. No more. Perhaps the most damning indictment of the status quo is offered by DSRC advocates themselves. Take this assessment from a former U.S. Department of Transportation official, now the director of a prominent university’s transportation institute: “I’ll grant you that DSRC is the modern-day equivalent of Morse code, but guess what, Morse code still works.”¹ Today, at long last, we say in a unified, bipartisan voice: - / - .. -- . / / ..- ---. ---.- Time’s up.

There are two fundamental reasons why we can no longer tolerate this inefficient use of the 5.9 GHz band.

First, there is a pressing need for us to allocate additional spectrum for unlicensed operations.² The pandemic has underscored that consumers need access and more bandwidth to be able to engage in telework, remote learning, telehealth, and other broadband-related services. And we have proof—not a concept, but actual evidence—that 5.9 GHz spectrum can help quickly address this need. We’ve granted temporary access to this very 45 megahertz of spectrum to Wireless Internet Service Providers who have

¹ Joey Capparella and Pete Bigelow, “Toyota Puts Connected-Car Tech Plans on Hold,” *Car and Driver* (Apr. 29, 2019), available at <https://www.caranddriver.com/news/a19855320/toyota-bets-big-on-connected-car-tech/>.

² See, e.g., Anna Eshoo and Ajit Pai, “The Feds Have to Get America Faster Wi-Fi,” *WIRED* (Feb. 7, 2016), available at <https://www.wired.com/2016/02/the-feds-have-to-act-to-get-america-faster-wi-fi/>; Statement of Commissioner Ajit Pai, Hearing before the Subcommittee on Communications and Technology of the U.S. House of Representatives Committee on Energy and Commerce (Dec. 12, 2012), <http://go.usa.gov/4t8Q>; Remarks of Commissioner Ajit Pai at CTIA’s MobileCon at 5-6 (Oct. 10, 2012), available at <http://go.usa.gov/4tkA>.

immediately put it to use, establishing or enhancing connectivity to rural and underserved areas.³ Moreover, unlicensed technologies like Wi-Fi provide wireless connectivity for countless products consumers rely on every day, and the number of such products is expanding rapidly. And the next-generation of Wi-Fi service, Wi-Fi 6, is expected to allow for maximum speeds that are two-and-a-half times faster than its predecessor technology while providing superior performance in crowded environments and improved battery life. Bottom line: More unlicensed spectrum directly benefits consumers in many ways.

Second, the automotive industry has pivoted from DSRC to Cellular Vehicle-to-Everything (C-V2X) technology. C-V2X is more reliable and resilient than DSRC and can take advantage of cellular-based connectivity to offload non-safety-of-life communications. C-V2X has momentum both domestically and internationally, with automakers such as Ford, Audi, Daimler, BMW, and Jaguar Land Rover pursuing deployment of C-V2X equipment.

These two factors lead to our decision today. In this order, we repurpose the lower 45 megahertz of the 5.9 GHz band for unlicensed operations. Specifically, we will immediately allow indoor unlicensed use of the 5.850-5.895 GHz band while seeking comment on rules for outdoor unlicensed operations as part of our Further Notice of Proposed Rulemaking. We will require the limited DSRC operations currently deployed over the full 5.9 GHz band to transition to the upper 30-megahertz segment of the band within one year. We also adopt C-V2X as the new technological standard for ITS operations in the upper 30 megahertz of the band and seek comment on the appropriate rules and timeline for transitioning from DSRC to C-V2X-based operations.

Our action will help to meet the demand for unlicensed spectrum that exists now and is only expected to rise in the coming years. And this 45 megahertz in the 5.9 GHz band punches above its weight: When paired with other adjacent unlicensed spectrum, we will make available, in the near term and on a widespread basis, a 160-megahertz channel for high-throughput unlicensed communications.

Our decision today will also improve automotive safety. By moving from DSRC to C-V2X, we are shifting from a failed technology of the past to a promising technology of the future. And based on the record, I am confident that the upper 30 megahertz of the 5.9 GHz band will provide the spectrum needed for safety-related services. Indeed, right now only 20 megahertz of the band are actually dedicated for safety applications.

Moreover, it is important to remember that spectrum other than the 5.9 GHz band can be used—in fact *is used*—for automotive safety technology. For example, in 2017, the Commission made available a contiguous, five-gigahertz band of spectrum in the 76-81 GHz band for vehicular radar systems. And other services, such as traffic light signal preemption, are readily available in other bands such as the 900 MHz band and the 2.4 GHz band.

So, notwithstanding the irresponsible rhetoric of some, this Commission does care about automotive safety. Indeed, it is precisely because we do that we're shifting from DSRC to C-V2X. The sad fact is that DSRC has done virtually nothing to improve automobile safety. A few corporate interests cannot squat on this spectrum for a generation and expect to maintain a stranglehold on it just by giving it the empty slogan of the "safety spectrum." Nearly two decades of failure is more than enough. The American people deserve better. And I am optimistic that C-V2X will actually deliver what DSRC advocates only promised for years: a widely-adopted, widely-deployed automotive safety technology that will save lives on the road.

³ See, e.g., "5.9 GHz Band Boosts Consumer Internet Access During COVID-19 Pandemic" (May 4, 2020), available at <https://docs.fcc.gov/public/attachments/DOC-364138A1.pdf>.

Given the balanced approach we are taking today, I am pleased with the support we have garnered across the political spectrum from the Open Technology Institute and Public Knowledge to Citizens Against Government Waste, FreedomWorks, and National Taxpayers Union. I also appreciate the backing we have received from unlicensed proponents including the Wi-Fi Alliance, WISPA, and NCTA and the recognition from forward-looking automotive interests that our decision today provides a path for C-V2X deployment.

Turning back to the song, *Give Me Just A Little More Time*, the Chairmen of the Board sang, “Life’s too short to make a mistake, Let’s think of each other and hesitate . . . I know we can make it, there’s no doubt. We owe it to ourselves to find it out.” Well, life is too short for us to make the mistake of continuing to allow valuable spectrum to lay fallow because of the false promise of a technology that has been stuck in the starting blocks for too many years. And hopefully, even they would agree that two decades is more than enough time to think and that the time for hesitation is surely over. We owe it to American consumers to put this spectrum to work for them and to quickly expand the capacity of unlicensed services and modernize transportation safety technology.

I want to thank our staff for their hard work in drafting this item. From the Office of Engineering and Technology: Bahman Badipour, Reza Biazaran, Brian Butler, Jamie Coleman, David Duarte, Patrick Forster, Monisha Ghosh, Howard Griboff, Michael Ha, Syed Hasan, Steve Jones, Ira Keltz, Paul Murray, Siobahn Philemon, Jamison Prime, Ronald Repasi, Rodney Small, Dusmantha Tennakoon, and Aole Wilkinsel; from the Enforcement Bureau: Matthew Gibson, Janet Moran, and Axel Rodriguez; from the Public Safety and Homeland Security Bureau: Renee Roland, Tracy Simmons, and Michael Wilhelm; from the Wireless Telecommunications Bureau: Katherine Nevitt, Roger Noel, Dana Shaffer, Joshua Smith, Donald Stockdale, and Joel Taubenblatt; from the Office of Economics and Analytics: Patrick DeGraba, Cher Li, Catherine Matraves, Patrick Sun, and Aleks Yankelevich; and from the Office of General Counsel: Deborah Broderson, Michael Carlson, David Horowitz, and Bill Richardson.