

United States Senate

WASHINGTON, DC 20510

February 13, 2023

The Honorable Jessica Rosenworcel
Chairwoman
Federal Communications Commission
45 L St., NE
Washington, D.C. 20554

Dear Chair Rosenworcel:

We write to urge the Federal Communications Commission (FCC) to take swift action on pending waiver requests to enable deployment of Cellular Vehicle-to-Everything (C-V2X) technology in the 5.9 GHz spectrum band. C-V2X technology is poised to save lives, will pave the way for the future of automobile and transportation infrastructure, and is supported by public and private transportation stakeholders from local and state governments to industry, academia, and public safety groups.

C-V2X is an intelligent transportation system (ITS) technology that allows data sharing between vehicles, roadside infrastructure, and nearby road users to enable various safety and efficiency applications. On November 20, 2020, the FCC announced its intention to offer waivers under 47 C.F.R. § 2.106, NG160 to transportation stakeholders to begin deployment of C-V2X technology in the 5.895-5.925 GHz spectrum band preceding the FCC's promulgation of a final ITS spectrum rule.¹ Since that announcement, the FCC's Public Safety and Homeland Security Bureau has received 18 waiver requests covering 31 entities seeking to deploy C-V2X technology, though none have yet been granted. We urge the FCC to continue working with the U.S. Department of Transportation and the National Telecommunications and Information Administration to quickly resolve any outstanding issues and expeditiously approve the waiver requests.

Swift action on these waivers is essential given C-V2X technology's potential to reverse rising roadway fatalities. The National Highway Traffic Safety Administration (NHTSA) estimated that 42,915 people died in motor vehicle traffic crashes in 2021, a 10.5 percent increase from 2020.² This represents the highest number of fatalities since 2005 and the largest annual percentage increase in the history of NHTSA's Fatality Analysis Reporting System. Many of these deaths are avoidable if we facilitate broad deployment of roadway safety technologies like C-V2X. Indeed, NHTSA has previously estimated that safety applications enabled by V2X could eliminate or mitigate the severity of more than 80 percent of light vehicle crashes.³

¹ FCC Docket 19-138, Use of the 5.850-5.925 GHz Band, First Order and Report, Further Notice of proposed Rulemaking, and order of Proposed Modification, <https://docs.fcc.gov/public/attachments/FCC-20-164A1.pdf>.

² NHTSA, Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2021, <https://www.nhtsa.gov/press-releases/early-estimate-2021-traffic-fatalities>.

³ U.S. Department of Transportation, Federal Motor Vehicle Safety Standards; V2V Communications, 82 Fed. Reg. 3854, 3863 (Jan. 12, 2017).

In addition to bolstering roadway safety, C-V2X technology can improve roadway efficiency and contribute to emissions reductions. In fact, the multi-agency U.S. National Blueprint for Transportation Decarbonization released in January 2023 stated that “connected mobility solutions enable unprecedented system-level improvements— better communication among vehicles and with infrastructure can smooth traffic flow and reduce congestion.”⁴ These benefits cannot be realized without action from the FCC to allow the safe deployment and scaling of this technology.

Encouragingly, the record before the FCC in the 5.9 GHz docket⁵ demonstrates that the ITS ecosystem is eager to integrate C-V2X technology into roadway systems and vehicles as soon as possible. State Departments of Transportation, U.S. automakers, universities, and other entities alike have submitted waiver requests and eagerly await the regulatory certainty that the FCC must provide to open America’s roadways to C-V2X-equipped vehicles and associated infrastructure. Among these is a coalition led by the University of Michigan which will deploy 21 C-V2X roadside units (RSUs) and 200 onboard units (OBUs) throughout Ann Arbor, Michigan. The University of Michigan coalition’s project will allow the transmission of vehicle safety warnings like forward collision warnings, vulnerable road user protection warnings to protect pedestrians and bicyclists, transit signal priority transmission to improve the flow of traffic, emergency vehicle preemption to clear the path for first responders, and more.⁶ These represent just a few of the applications of C-V2X technology, and it is our expectation that many more will be realized once the FCC begins approving these waiver requests.

Recognizing the FCC’s mandate of responsible stewardship of U.S. spectrum use for the public interest and given the many ways in which Americans stand to benefit upon deployment of this technology, we urge you to act swiftly to approve the pending waiver requests for the deployment of C-V2X technology in the 5.9 GHz spectrum band.

Sincerely,



Gary C. Peters
United States Senator



Cynthia M. Lummis
United States Senator

⁴ The U.S. National Blueprint for Transportation Decarbonization, <https://www.energy.gov/sites/default/files/2023-01/the-us-national-blueprint-for-transportation-decarbonization.pdf>.

⁵ FCC Docket 19-138, Use of the 5.850-5.925 GHz Band, [https://www.fcc.gov/ecfs/search/search-filings/results?q=\(proceedings.name:\(%2219-138%22\)\)&limit=100&sort=date_disseminated,DESC](https://www.fcc.gov/ecfs/search/search-filings/results?q=(proceedings.name:(%2219-138%22))&limit=100&sort=date_disseminated,DESC).

⁶ FCC Docket 19-138, Use of the 5.850-5.925 GHz Band, Request for Waiver of 5.9 GHz Band Rules to Permit Deployments of Cellular Vehicle-to-Everything Technology, <https://www.fcc.gov/ecfs/document/10811671504488/1>.