

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON

December 3, 2019

The Honorable Debbie Dingell U.S. House of Representatives 116 Cannon House Office Building Washington, DC 20515

Dear Congresswoman Dingell:

Thank you for your letter concerning the 5.9 GHz band. I believe the time has come for the FCC to take a fresh look at the 5.9 GHz band, and the draft Notice of Proposed Rulemaking that I have circulated to my colleagues takes a balanced approach. My proposal is to allocate the upper 20 MHz for Cellular Vehicle to Everything, or C-V2X, technology, which as you observe "has emerged as another potential communications platform that could . . . help orchestrate traffic and improve roadway safety." I'm also proposing to make available the lower 45 MHz of the band for unlicensed uses like Wi-Fi. The proposal also would seek public input on whether to allocate the remaining 10 MHz in the band to DSRC or C-V2X. The Commission will vote on this Notice of Proposed Rulemaking at our December 12 meeting.

The FCC has long been a supporter of innovation in the transportation sector. Keyless entry, tire pressure monitors, anti-theft systems, and security services to name a few. These are all technologies enabled by FCC actions. And during my tenure, automotive safety has been an important priority. Back in 2017, I led an effort to allocate a large swath of contiguous spectrum in the 76-to-81 GHz band exclusively for vehicular radars. These radars have proved especially useful for emergency braking and adaptive cruise control. In contrast, many of the features originally envisioned for DSRC are being provided today by other means. Applications like Waze help with traffic management and provide alerts far in advance of road hazards ahead. Blind-spot detection and lane-departure warnings have become common features on the latest cars—and are done without DSRC.

Like you, I'm optimistic about the promise of C-V2X. It is gaining momentum in the automotive industry and promises to use standard cellular protocols to provide direct communications between vehicles, and, as the name suggests, everything—including other vehicles on the road, infrastructure, cyclists, pedestrians, and road workers. C-V2X is also expected to support new, advanced applications as we transition to faster, more responsive 5G networks.

My proposal to take a balanced approach—one that includes an exclusive home for C-V2X technology in the 5.9 GHz band—is already gaining broad support. For instance, as the 5G Automotive Association has put it, "Extensive crash avoidance testing continues to demonstrate that C-V2X technology will deliver safety benefits to the American public." That's why the 5G Automotive Association "applauds" the draft proposal. And that's why Ford has stated, "Without this proceeding, C-V2X cannot be deployed. Without this proceeding, innovation is

paralyzed. Without this proceeding, the opportunity to realize significant safety benefits is delayed. Triggering a deliberative process to carefully but expeditiously include C-V2X as a crash avoidance technology is the appropriate and timely step. It will also mitigate congestion, reduce carbon emissions and lead to widespread socioeconomic benefits."

One final note. My proposal marks a departure from our recent exploration of allowing unlicensed devices to share the same spectrum with DSRC. That approach was premised on a slow and complex testing process designed in 2015—and one that did not even envision the use of C-V2X technologies. Although preliminary testing of a sharing regime showed some promise, further testing would be needed to carry out a complex sharing regime, and more testing would mean this valuable spectrum would likely lie fallow for several years. We are well past the point where American consumers should accept significant additional delays in putting this spectrum to use for them. And it's not just that sharing spectrum between unlicensed uses and DSRC would take time. It raises the question of whether, given its past, DSRC is a technology with a future. That's why I believe the best course is to end our attempts at sharing and instead establish an exclusive home for transportation-related communications.

Thank you for your interest in this proceeding. Please let me know if I can be of any further assistance.

Sincerely,

Aiit V. Pai



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The Honorable Fred Upton U.S. House of Representatives 2183 Rayburn House Office Building Washington, DC 20515

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