FCC 19-129

STATEMENT OF CHAIRMAN AJIT PAI

Re: Use of the 5.850-5.925 GHz Band, ET Docket No. 19-308.

Exactly 20 years ago, the Commission allocated 75 megahertz of spectrum in the 5.9 GHz band for a technology called Dedicated Short-Range Communications, or DSRC. DSRC was designed to facilitate motor vehicle-related communications. But unfortunately, it's never been widely deployed. And in the meantime, a wave of new transportation communication technologies has emerged, as has demand for unlicensed spectrum. As a result, a lot of people are wondering whether this valuable spectrum—a public resource—is really being put to its best use. In my view, it is not.

After two decades of dormancy, the 5.9 GHz band deserves a fresh look by the FCC. And that's exactly what we are doing. In this Notice, we tee up a balanced proposal that will advance both unlicensed wireless innovation and automotive safety technologies.

The reason we're focusing in part on unlicensed operations is simple. Today, Wi-Fi is a staple of everyday life. It is the fabric that binds together all our devices. It has become a foundational technology for the Internet of Things, connecting virtually any device or appliance you can think of. Wi-Fi currently carries more than half of the Internet's traffic, and that share will only grow in the future. The next generation of Wi-Fi, Wi-Fi 6, is being rolled out this year and will provide better connections to multiple devices and better performance in congested environments. The economic value created by Wi-Fi in the United States is projected to double by 2023—reaching nearly \$1 trillion.

To fully realize Wi-Fi's potential, we need to make more spectrum available for unlicensed use. And that's just what the FCC is doing. In March, for example, we made over 21 gigahertz of spectrum above 95 GHz available for use by unlicensed devices. And we are working hard to free up spectrum in the 6 GHz band—what could be a massive, 1,200-megahertz test bed for innovators and innovation.

But here, we're proposing to designate the lower 45 megahertz of the 5.9 GHz band exclusively for unlicensed uses like Wi-Fi. The adjacent 5.725-to-5.850 GHz band is currently available for unlicensed operations, making this 45 MHz sub-band ideally suited for unlicensed use. Having more contiguous spectrum here is essential for the larger channels needed to support innovative use cases.

Another part of our proposal advances the cause of automotive safety. Specifically, we're proposing to reserve the remaining 30 megahertz of spectrum in the 5.9 GHz band exclusively for transportation-related communications technologies. This is consistent with our longstanding support for automotive safety during my tenure. Back in 2017, we ensured there would be 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.

One promising new technology that is gaining momentum in the automotive industry is Cellular Vehicle to Everything, or C-V2X. C-V2X would use standard cellular protocols to provide direct communications between vehicles, and, as the name suggests, everything—including other vehicles on the road, infrastructure (like light poles), cyclists (like me), pedestrians, and road workers. C-V2X also is expected to support new, advanced applications as we transition to faster, more responsive 5G networks. And it's backed by automakers like Ford, Audi, BMW, Daimler, and Tesla. So we're proposing to designate the upper 20 MHz for this exciting, new automotive communications technology. This would be a significant step forward for automotive safety since there is currently *no* spectrum allocated for C-V2X. As Ford's CEO, James Hackett wrote to us, "[e]xtensive testing has shown that CV2X will give people the ability to move more safely and freely than ever before . . . Without this proceeding, CV2X cannot be deployed."

And we're not closing the door on DSRC. Japan has a single 10-megahertz channel for DSRC that's actively used for collision avoidance. In the Notice, we seek comment on whether to designate the

remaining 10 megahertz of spectrum in the upper part of the 5.9 GHz band for DSRC or C-V2X. I encourage advocates of each technology to make their cases.

This balanced approach—dedicating 45 megahertz of the 5.9 GHz band for more unlicensed innovation and 30 megahertz for automotive safety—maximizes the value of the band for the American people. And it would do far more for both automotive safety and Wi-Fi than the status quo.

The support for moving forward with this proposal is simply overwhelming. It includes a bipartisan juggernaut from Congress, including Senator Ron Johnson, House Energy and Commerce Vice Chair Yvette Clarke, House Energy and Commerce Subcommittee on Communications and Technology Ranking Member Bob Latta, and Representatives Jerry McNerney, Anna Eshoo, G.K. Butterfield, Doris Matsui, Billy Long, Mark Walker, Tom Emmer, Brian Babin, and Andy Biggs. It includes think tanks and consumer groups like ALLvanza, American Commitment, American Conservative Union, American Legislative Exchange Council, American Library Association, Americans for Tax Reform, Center for Individual Freedom, Citizens Against Government Waste, Competitive Enterprise Institute, Consortium for School Networking, Consumer Action for a Strong Economy, Digital Liberty, Discovery Institute, Dynamic Spectrum Alliance, Electronic Frontier Foundation, Engine, Free State Foundation, FreedomWorks, Innovation Defense Foundation, Innovation Economy Institute, Institute for Freedom, Institute for Policy Innovation, Less Government, Lincoln Network, Market Institute, Multicultural Media, Telecom, and Internet Council, National Taxpayers Union, New America's Open Technology Institute, Pelican Center for Technology and Innovation, Public Knowledge, Small Business and Entrepreneurship Council, Taxpayers Protection Alliance, TechFreedom, and WifiForward. It includes industry groups and companies like the 5G Automotive Association, The App Association, Broadcom, Charter, Comcast, Facebook, Ford, Intel, Microsoft, National Puerto Rican Chamber of Commerce, NCTA - The Internet and Television Association, Nokia, Oualcomm, Samsung, Verizon, and the Wireless Internet Service Providers Association.

Thank you to the FCC staff who are working hard to ensure that this spectrum is put to its highest-value use—most notably, my friend and the legendary head of our Office of Engineering and Technology, Julie Knapp. I also would like to thank, from the Office of Engineering and Technology, Reza Biazaran, Rashmi Doshi, David Duarte, Patrick Forster, Howard Griboff, Syed Hasan, Steve Jones Ira Keltz, Paul Murray, Aspa Paroutsas, Jamison Prime, Karen Rackley, Dusmantha Tennakoon, and Ron Williams; from the Wireless Telecommunications Bureau, Tom Derenge, Charles Mathias, Roger Noel, Sean Spivey, and Scot Stone; from the Office of General Counsel, Deborah Broderson, David Horowitz, and Bill Richardson; from the Public Safety and Homeland Security Bureau, David Furth, Renee Roland, Rasoul Safavian, and Michael Wilhelm; from the International Bureau, Jose Albuquerque; from the Enforcement Bureau, Matthew Gibson, David Marks, and Paul Noone; and from the Wireline Competition Bureau, Justin Faulb.