U.S. Chamber of Commerce

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Via ECFS

Ms. Marlene Dortch
Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

NextNav Petition for Rulemaking, Enabling Next-Generation Terrestrial Positioning, Navigation, and Timing and 5G: A Plan for the Lower 900 MHz Band (902-928 MHz), Public Notice (WT Docket No. 24-240)

Dear Ms. Dortch,

The undersigned organizations write in response to the Federal Communications Commission's ("FCC") Public Notice regarding NextNav's petition for rulemaking to reorganize the 902-928 MHz band ("Lower 900 MHz Band or Band") and establish a 5G terrestrial-based Positioning, Navigation, and Timing ("PNT") network ("NextNav Petition").[1] Our organizations, representing a broad cross-section of industry that utilizes the Lower 900 MHz band, oppose the NextNav Petition due to the likelihood of it causing significant and adverse disruption to the hundreds of millions of Part 15 devices currently using the band.[2]

The Lower 900 MHz band is utilized for a wide range of purposes, including industrial, scientific, and medical equipment, Location and Monitoring Service ("LMS") systems, federal radiolocation, Part 15 unlicensed devices and amateur radio operators.[3] A key requirement of this band is that the services of licensed users must coexist with Part 15 unlicensed devices. This is done through field testing to demonstrate that there is no unacceptable interference to Part 15 devices, which led manufacturers to develop a broad range and large number of unlicensed commercial and consumer products and devices for this band.[4] The NextNav Petition proposes to eliminate that protection, endangering the viability of Part 15 devices.

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[1] *NextNav Petition for Rulemaking, Enabling Next-Generation Terrestrial Positioning, Navigation, and Timing and 5G: A Plan for the Lower 900 MHz Band (902-928 MHz),* Public Notice, WT Docket No. 24-240 (rel. Aug. 6, 2024) ("Public Notice").

[2] Part 15 devices are regulated by the FCC that set limitations on radio frequency emissions. This includes nearly all devices that emit radio frequency energy.

[3] Public Notice at 1-2.

[4] *Id*. at 4.

The NextNav Petition claims that the Band is underutilized thereby justifying Commission action to reorganize the Lower 900 MHz band.[5] We disagree with that contention.

Much of the business community utilizes Part 15 devices to increase economic productivity and efficiency, bolster safety, deliver innovation, and provide other important benefits to consumers, customers, and the public. The use cases listed below demonstrate the utilization of the band including:

- **Municipal Infrastructure**: Municipal systems, including traffic control, street lighting, weather monitors, and flood warning systems that are deployed in this band to make communities safer and more energy efficient, could be disrupted.

- **Critical Infrastructure**: Utilities use the 900 MHz band to remotely monitor and manage their power, gas, and water distribution networks. Interference could pose a threat to these operations, which are legally required to maintain extremely high levels of reliability because of the impact of outages or other disruptions.

- **Railroad Operations and Safety**: Automatic Equipment Identification ("AEI"), critical for the rail industry, enables accurate and efficient tracking of railcars and equipment throughout the network relying on 900 MHz frequencies. In addition to the AEI network, the rail industry's signals and communications group rely on unlicensed 900 MHz spectrum for connecting opposing ends of signal interlockings, remote drawbridge operation over waterways, traffic control, sensors, and other communications devices essential to maintaining operational safety and efficiency.

- **Highway Infrastructure and Tolling**: The Petition threatens to disrupt electronic tolling systems, such as E-ZPass and other similar toll collection systems, which rely on licensed spectrum allotments in the Lower 900 MHz band for seamless operation. Interference could lead to widespread issues in tolling accuracy and efficiency – potentially affecting millions of daily commuters – as well as foreclose important new deployments, including systems that provide urban congestion relief.

- **Smart Home and Building Devices**: By potentially interfering with the 900 MHz band, the Petition undermines the reliability of smart home and building devices, from thermostats to smart locks to security systems. This would cause significant inconvenience and safety risks for property-owners relying on these technologies.

- **Security Cameras and Systems**: The 900 MHz band is vital for millions of security cameras, including popular models used in homes and small businesses. These devices are essential for protecting homes, preventing package theft and home intrusions, ensuring children's safety, and aiding law enforcement by capturing criminal activity.

[5] NextNav Petition for Rulemaking, Enabling Next-Generation Terrestrial Positioning, Navigation, and Timing and5G: A Plan for the Lower 900 MHz Band (902-928 MHz) at 20 (filed Apr. 16, 2024).

- **Retail, Manufacturing, and Supply Chain Operations**: Disruption to building control systems, tank, and leak monitoring systems, inventory controls systems, fleet management and asset tracking tools, price scanners, and other systems deployed in major retailers, suppliers, manufacturers, and small businesses across the United States would cause serious harm to our economy.

- **Agriculture**: Our nation's smart agriculture sector's innovative solutions for connecting the modern farm's Internet of Things devices and equipment leverage the reliability of the 900 MHz band to keep our farms connected.

Moreover, innovations and deployments in the 900 MHz band are accelerating, including by new and growing technologies such as drone operations. The changes proposed by NextNav potentially threaten to disrupt these established business and governmental operations, impede ongoing innovation in this band, and undermine reliable communications systems across several industries. The likely adverse impact and broad set of uses indicate that the Commission should proceed with caution on the NextNav Petition and ensure that Part 15 devices remain fully operational.

The NextNav Petition proposals to address those concerns are "to work with unlicensed users to understand their spectrum requirements" and to "complete technical analyses intended to address representative Lower 900 MHz Band Part 15 uses."[6] The NextNav Petition fails to produce any further details about those technical studies and lacks any detail on how they intend to work with Part 15 device users to address the adverse consequences listed above. In our view, this lack of information makes the Petition and the record incomplete.

Finally, the NextNav Petition indicates that coexistence between NextNav's proposed terrestrial PNT service and Part 15 devices "should be achievable."[7] We agree because the Commission's existing rules for the Lower 900 MHz Band already promote coexistence between Part 15 devices and other licensees through requiring field testing of LMS systems to ensure those systems do not cause unacceptable levels of interference. Instead, NextNav has proposed to remove this requirement entirely, calling into question how coexistence would be achievable under NextNav's proposed framework. The FCC should maintain the existing rules to require field testing to ensure coexistence with Part 15 devices, ensuring the continued operation of hundreds of millions of Part 15 devices relied upon by consumers and commercial users across many industries including transportation, agriculture, utility, state and local governments, and more.

Thank you for considering our comments on this proceeding. Please reach out to Matt Furlow, Senior Director and Policy Counsel, at mfurlow@uschamber.com with any questions regarding these comments.

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[6] *Id*. at 31.
[7] *Id*.

Sincerely,

ACT | The App Association
Aerospace Industries Association (AIA)
Airlines for America
Airports Council International – North America
Alarm Industry Communications Committee
American Apparel & Footwear Association
American Gas Association
American Petroleum Institute
American Short Line and Regional Railroad Association
American Trucking Associations
Association of American Railroads
Association of Home Appliance Manufacturers
Association for Uncrewed Vehicle Systems International
Builders Hardware Manufacturers Association
Cargo Airline Association
Colorado Motor Carriers Association
Computer & Communications Industry Association (CCIA)
Connected Health Initiative
Connectivity Standards Alliance
Consumer Technology Association (CTA)
Dynamic Spectrum Alliance (DSA)
Edison Electric Institute
Electronic Security Association
Energy Telecommunications and Electrical Association (ENTELEC)
Enterprise Wireless Alliance
General Aviation Manufacturers Association
Halloween Industry Association (HIA)
Idaho Trucking Association
Illinois Trucking Association
INCOMPAS
Indiana Motor Truck Association
Information Technology Industry Council (ITI)
Intelligent Transportation Society of America
International Bridge Tunnel and Turnpike Association (IBTTA)
Juvenile Products Manufacturers Association
LoRa Alliance
Maryland Motor Truck Association
Missouri Trucking Association
National Association of Manufacturers

National Electrical Manufacturers Association
National Hydropower Association
National Retail Federation
Nebraska Trucking Association
Nevada Trucking Association
Oklahoma Trucking Association
Retail Industry Leaders Association
Rhode Island Trucking Association
Security Industry Association
Software & Information Industry Association (SIIA)
TechNet
Telecommunications Industry Association (TIA)
Tennessee Trucking Association
Texas Trucking Association
The Monitoring Association
The Small UAV Coalition
The Toy Association
Trucking Association of Massachusetts (TAM)
Trucking Association of New York
Utah Trucking Association
Utilities Technology Council
Vertical Aviation International
Virginia Trucking Association
Washington Trucking Associations
Wi-Sun Alliance
Wi-Fi Alliance
WifiForward
Wisconsin Motor Carriers Association
Wireless Broadband Alliance (WBA)
Wyoming Trucking Association
U.S. Chamber of Commerce
Z-Wave Alliance