June 4, 2026

The Honorable Brett Guthrie
Chairman
House Committee on Energy & Commerce
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Frank Pallone
Ranking Member
House Committee on Energy & Commerce
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Richard Hudson
Chairman
Subcommittee on Communications & Technology
2125 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Doris Matsui
Ranking Member
Subcommittee on Communications & Technology
2125 Rayburn House Office Building
Washington, DC 20515

Re: CMT Hearing: Where Are We?: Examining Positioning, Navigation, and Timing Capabilities in the United States

Dear Chairman Guthrie, Ranking Member Pallone, Chairman Hudson, and Ranking Member Matsui:

The Security Industry Association ("SIA") applauds the Communications & Technology Subcommittee for conducting a hearing on Positioning, Navigation, and Timing ("PNT") capabilities in the United States. As concerns grow about the potential for spoofing, jamming or inadvertent disruption of the Global Positioning System ("GPS"), it is critical for U.S. national and economic security to examine GPS alternatives.

Nonetheless, I write to express SIA's strong opposition to the proposal by NextNav, Inc. ("NextNav") to radically reallocate substantial portions of the 902-928 MHz Band (the "Lower 900 MHz Band") for a full-power 5G commercial system.[1] If its proposal is adopted, 60% of the Band would be allocated for NextNav's primary usage, drowning out critical life-safety uses.

SIA is a U.S. trade association representing more than 1,700 security solutions providers, ranging from large firms to locally owned and operated small businesses, whose members include manufacturers of security devices, alarm system communications, and electronic access control devices that operate within the Lower 900 MHz Band. Opposition to NextNav's proposal spans a broad swath of industries that touch Americans every day, including airlines, trucking, consumer technology, utilities, and telecommunications.

[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), WT Docket No. 24-240 (filed Apr. 16, 2024) ("NextNav Petition").

As the subcommittee examines PNT alternatives to GPS, we respectfully urge you and your colleagues to consider the devastating consequences the NextNav proposal would have on public safety, security systems, and the millions of Americans who rely on these devices every day. The United States has multiple PNT alternatives at its disposal that do not involve rendering billions of public safety and security devices inoperable, which is why the Federal Communications Commission ("FCC") must reject the NextNav proposal.

The Lower 900 MHz Band Is Critical to Public Safety and Security

The Lower 900 MHz Band is heavily utilized by first responders and the security industry for an array of critical functions. These include "man down" systems, wireless microphones and headsets that help police and firefighters communicate during emergencies, gunshot detection systems, vehicle alerting systems that enable remote activation of lights and sirens, fire station automation relays, utility shutoffs in response to hazardous conditions, sensors used to monitor and control traffic during severe weather events, natural gas leak detection systems, and fire detection sensors in high-rise buildings.[2]

SIA's members produce and deploy devices that are equally essential to public safety and the protection of homes, businesses, and critical infrastructure. These devices include smoke and carbon monoxide detection systems, doorbell cameras, panic alarms, home security systems, door locks, security camera and communications systems, and electronic access control devices that provide safety and security functions utilized by consumers, businesses, and first responders nationwide.

NextNav's Proposal Would Render Critical Safety Devices Inoperable

NextNav's proposed 5G cellular network would dramatically alter usage of the Lower 900 MHz Band by providing NextNav with a nationwide license for a 5G cellular network with a 10-megahertz downlink paired with a 5-megahertz uplink, meaning that nearly 60% of the Band would be allocated for primary usage by NextNav. The proposed downlink would transmit at roughly 4,000 watts, while current unlicensed Part 15 devices are limited to just 2.5 watts - that's roughly 1,600 times more powerful than devices currently operating in the Band. This enormous power disparity would result in a severe reduction in the range and functionality of current Part 15 devices.

SIA commissioned an independent technical coexistence study conducted by Pericle Communications Company ("Pericle Report") to evaluate the impact of the NextNav proposal.[3] The Pericle Report conclusively demonstrates that NextNav's proposed network and incumbent Part 15 devices simply cannot co-exist. The propagation modeling and Monte Carlo simulations employed in the study show that the deterioration in receiver sensitivity that would result from NextNav's network, as well as ensuing co-channel and adjacent channel interference, would be so drastic as to make the Band unusable for incumbent unlicensed devices.

Specifically, the Pericle Report finds that outdoor unlicensed Part 15 devices using a 200 kHz bandwidth would need a signal to be, at a minimum, 538 times greater in order to overcome the interference from the NextNav network—effectively rendering these devices inoperable. The

[2] Letter from International Association of Fire Chiefs, et al, to Marlene Dortch, Secretary, FCC, WT Docket Nos. 24-240 and 25-110, Nov. 19, 2025 ("Public Safety Letter").
[3] Letter from Howard Waltzman, Counsel to the Security Industry Association, to Marlene Dortch, Secretary, FCC, WT Docket Nos. 24-240 and 25-100, Attachments 2 and 3, Sept. 12, 2025.

study's simulations further demonstrate that wireless cameras utilizing the Band and other similar representative connected devices would experience interference and blocking from NextNav's proposed network more than 60% of the time, even at a coverage radius of 2.0 km. At smaller coverage radii, the likelihood of interference is even greater—effectively stripping the devices of all utility.

The Practical Consequences Are Devastating

If approved, NextNav's proposal would mean that door locks will be unable to reliably communicate with corresponding alarm systems, many security cameras will be unable to communicate with remote monitoring systems, and smoke detectors may be unable to communicate with home hubs, meaning they will be unable to provide the fire and smoke alerts for which they are designed. Even temporary interference could result in gaping security vulnerabilities—for instance, if a window or door sensor misses a transmission due to interference, it could even result in a failure to trigger an alarm. With their communications impeded, security devices will be unable to promptly notify first responders of incidents, negating a crucial tool for first responders, who also use these devices for incident verification before dispatch.

NextNav's proposal would force existing Lower 900 MHz Band users, which currently share 26 MHz of spectrum, into just the roughly 40% of the Band that would not be controlled by NextNav. This would dramatically increase congestion in the remaining 11 megahertz of the Band, while subjecting such users to harmful interference from NextNav's much higher-power operations on adjacent frequencies. Furthermore, NextNav seeks the removal of the current requirement that it not cause unacceptable levels of interference to Part 15 devices—a remarkable admission that its proposal will, in fact, inflict such interference.[4]

Mitigation Is Not Possible

As the Pericle Report demonstrates, due to the high-power levels of NextNav's proposed system and the nature of the security devices that utilize the Lower 900 MHz Band, mitigation of NextNav's interference is simply not possible. The devices cannot be remotely reprogrammed or modified to accommodate the NextNav solution. Even if it were technically feasible to alter device operation, such a material change would in most cases require an entirely new chipset, meaning the devices would need to be entirely redesigned, physically removed, replaced, and re-installed. Additionally, a change in the operation of the device itself would also require a change to corresponding hub devices with which the devices communicate, meaning that entire systems would need to be completely replaced. With billions of devices installed nationwide, the monetary costs would be significant and the burden on consumers to replace the devices in their homes would be extreme.

Viable GPS Alternatives Exist That Do Not Harm Public Safety

SIA supports the identification and cultivation of terrestrial and other technologies that can provide a backstop against GPS vulnerabilities and ensure the continuity of PNT information for a multitude of U.S. industries. However, these solutions should be additive to the PNT ecosystem as a whole, augmenting existing functionalities rather than detracting from them by making public safety and security devices inoperable.

[4] NextNav Petition at A-6, A-11.

Conclusion

The opposition to NextNav's proposal stretches across a wide spectrum of industries, including airlines, footwear, oil and gas, trucking, tolling, consumer technology, hydropower, retail, software, telecommunications, and utilities.[5] SIA's opposition is grounded solely in the devastating consequences the proposal would inflict on the billions of devices nationwide that currently operate in the Lower 900 MHz Band—chief among them devices used for public safety, home safety and security, access control, and meter reading.

We urge the Committee to give serious consideration to the decimating impact of interference from the NextNav proposal to the billions of devices on which Americans depend. NextNav's proposal is simply not a viable one. We respectfully urge the Committee to relay to the FCC the serious concerns raised by NextNav's proposal, and that any solution for increasing the reliability of PNT infrastructure in the U.S. must not put at risk the critical public safety, security, and critical-infrastructure devices that currently operate in the Band. In short, NextNav's proposal should not be given further consideration.

SIA stands ready to provide any further information you might need as the important issue of PNT capabilities in the U.S. continues to be explored.

Sincerely,

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[5] *See, e.g.*, Comments of U.S. Chamber of Commerce et al, WT Docket No. 24-240, Sept. 5, 2024; *see also* Public Safety Letter; Letter from Aerospace Industries Association, Air Line Pilots Association, International, Airlines for America, et al, to Brendan Carr, Chairman, FCC, et al, WT Docket Nos. 24-240 and 25-100, Apr. 6, 2026; Comments of the Utilities Technology Council, WT Docket No. 24-240, Sept. 5, 2024; Comments of the Z-Wave Alliance, WT Docket No. 24-240, Sept. 5, 2024; Comments of the Edison Electric Institute, WT Docket No. 24-240, Sept. 5, 2024.