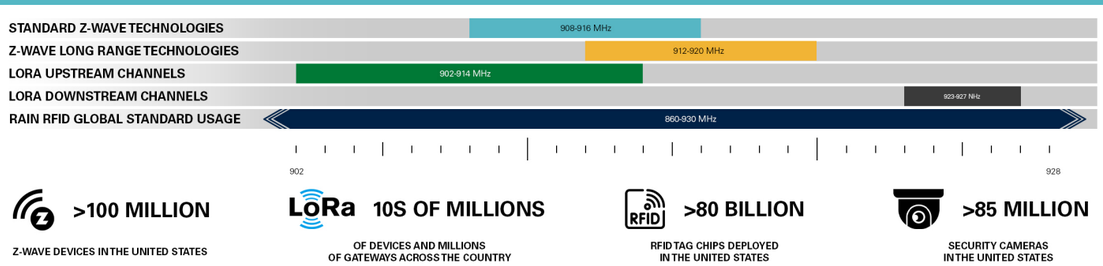
About SIA

SIA is a U.S. trade association representing more than 1,600 security solutions providers, ranging from large firms to locally owned and operated small businesses. Protecting our country, our citizens and our economy is the ultimate mission of the security industry, which contributes over $430 billion to the economy and provides more than 2.1 million jobs in the United States.

Thriving Environment Throughout the Lower 900 MHz Band



References

Petition for Rulemaking of NextNav, Inc., WT Docket No. 24-240 (filed Apr. 16, 2024) (NextNav Petition)

Letter from Robert Lantz, General Counsel, NextNav Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 24-240 (June 10, 2024)

Wireless Telecommunications Bureau and Office of Engineering and Technology Seek Comment on NextNav Petition for Rulemaking, Public Notice, DA 24-776 (rel. Aug. 6, 2024) (Public Notice)

Comments of the Z-Wave Alliance, WT Docket No. 24-240 (Sept. 5, 2024).

Comments of the LoRA Alliance, WT Docket No. 24-240 (Sept. 5, 2024).

Joint Comments of RAIN Alliance Inc. & AIM Inc., WT Docket No. 24-240 (Sept. 5, 2024).

James Gilb (IEEE 802 LAN/MAN Standards Committee

Reply to Comments. WT Docket No. 25-110 (May 6, 2025).

Comments of the National Electrical Manufacturers Association, WT Docket No. 24-240 (Sept. 5, 2024).

Utilities Technology Council Notice of Ex Parte, WT Docket No. 24-240 (July 28, 2025).

Analysis: NextNav's Claims of Non-Interference in the Lower 900 MHz Band, Comments of the Z-Wave Alliance, WT Docket No. 24-240 (Apr. 9, 2025).

International Bridge, Tunnel & Turnpike Association (IBTTA). "Protecting the lower 900 MHz Spectrum for Tolling and Transportation." IBTTA, Spring 2025, https://www.ibtta.org/sites/default/files/documents/Advocacy/IBTTA_900MHzSafety_031725_Ltr.pdf

Protect the Lower 900 MHz Band

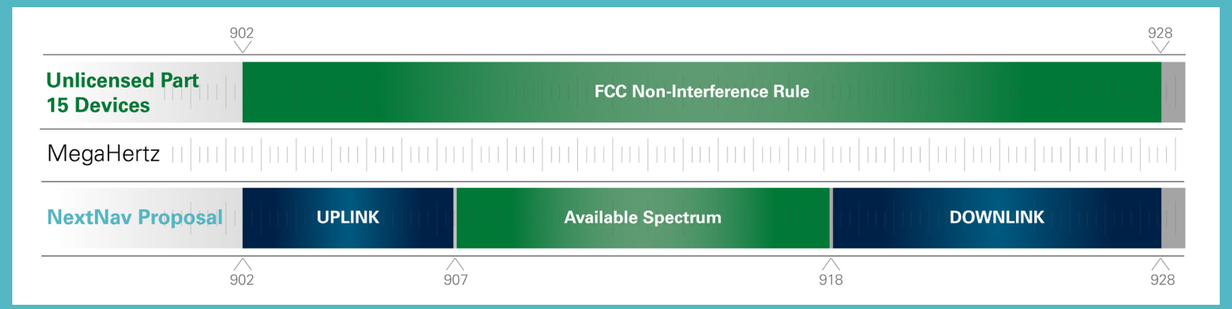
Maintain Access for Important Public Safety and Security Technologies

What Is the Lower 900 MHz Band?

A portion of the 900 MHz spectrum from 902-928 MHz, known as the "Lower 900 MHz Band" established under current FCC rules contains a vibrant ecosystem for unlicensed devices. These unlicensed devices span a range of uses, including public safety, home automation, wireless internet service providers WISPs, security, access control, and meter reading. In particular, incumbent unlicensed Part 15 devices utilizing the Lower 900 MHz Band include fire and carbon monoxide alarms, panic buttons, flood sensors, motion sensors, and a range of other live-saving devices – and these devices are used across millions of homes, businesses, and government buildings, as well as rural, suburban, and urban environments.

What Are the Proposed Changes to the Band?

On April 16, 2024, NextNav Inc. filed a Petition for Rulemaking with the Federal Communications Commission (FCC) to radically change the FCC's rules governing the 902-928 MHz frequency band. This proposal would give NextNav fifteen of the twenty-six megahertz to provide a high-power 5G system for location services, and would remove the protections the unlicensed devices the operate in the Lower 900 MHz Band have against harmful interference.



How Will the NextNav Proposal Affect You?

The Lower 900 MHz band is heavily utilized by security, alarm system communication, and electronic access control devices that would be rendered useless by NextNav's proposed high-power usage in the band. These devices include, but are not limited to:

- Alarm Systems
- Automatic Door Locks
- Smoke Detectors
- Carbon Monoxide Detectors
- Home Automation Security Solutions
- Security Cameras
- Panic Buttons
- Gun Shot Detection
- Electronic Access Control Devices
- Encrypted Communication Devices
- Intrusion Sensors
- Glass Break Detectors
- Fire Alarm Pull Stations
- Medical "Call" Pull Cords
- Medical Pendants
- Temperature Sensors
- Fall Pendants
- Remote Keypads
- Smart Locks
- Security Control Panels

What Will the NextNav Proposal Cost?

Given the vital life safety functions of these devices, it is crucial that their communications work reliably as engineered, as even temporary interference can result in gaping security vulnerabilities. If the NextNav proposal is implemented, millions of consumers will find that the devices that protect their homes, businesses, and neighborhoods must be replaced entirely. The cost of replacing and retooling security devices alone in this bandwidth will reach billions of dollars. But the potential costs to public safety will be much more devastating when high-powered interference causes security vulnerabilities across a range of devices that are relied upon daily to keep lives and property safe.

SIA members are committed to ensuring that security devices and technologies provide reliable, critical life safety services for users. We support the protection of unlicensed use in this band so that the technologies used to protect public safety and American families can continue to operate in a competitive environment that drives growth and innovation.

Opposition to the NextNav Proposal is Widespread

Utilities Technology Council™

"The relief sought by the NextNav Petition would clearly cause significant and widespread interference to unlicensed operations in the band. The public interest clearly weighs in favor of these unlicensed operations, including the public's interest in electric reliability, safety and security."

- Utilities Technology Council

NEMA

"Rearranging this band would have ripple effects on a significantly large base of installed equipment requiring product recalls, restructuring of existing customer networks, and implementing significant changes to existing utility rate bases that serve as the basis for billing customers' electricity usage."

– National Electrical Manufacturers Association

IEEE

"Given that the solutions provided by NextNav Inc. will cause excessive interference to Part 15 devices currently operating in the 900 MHz band and will severely impact their operation, we respectfully request the commission to consider these adverse impact on the current devices and services, and reject the option provided by NextNav."

– Institute of Electrical and Electronics Engineers 802 LAN/MAN Standards Committee

New Study Released

The Security Industry Association commissioned an independent analysis of NextNav's proposal from Pericle Communications. As the Pericle study details, NextNav's proposed 5G cellular network and reallocation of the Lower 900 MHz Band would be detrimental to the billions of unlicensed Part 15 devices that currently operate in the band.

The Pericle study demonstrates that these devices and NextNav's proposed network simply cannot co-exist. 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.

The study's simulations demonstrate that wireless cameras and similar unlicensed incumbent Part 15 devices will experience interference and blocking from NextNav's proposed network more than 60% of the time, even at a coverage radius of 2.0 km.

NextNav itself seems to acknowledge that its proposed network will create this interference, as it has sought "the removal of the current requirement that [NextNav] not cause unacceptable levels of interference to Part 15 devices." NextNav's proposal would also go so far as to require Part 15 devices to shut down if they cause harmful interference to NextNav's devices.

Due to the decentralized nature of these devices and the fact that the majority of them are customer-controlled, such a shutdown would be impossible in practice, further evidencing the technical impracticability of NextNav's proposal.

As the Pericle study demonstrates, NextNav's proposed network would have devastating consequences for the myriad of existing unlicensed users of the Lower 900 MHz Band, including the public safety devices on which millions rely on a daily basis for life-saving communications.

The FCC should not advance the NextNav proposal. To the extent the FCC is seeking to identify location services that can provide an alternative to or backup for GPS, there are a multitude of other technologies that can provide location accuracy without wreaking havoc on billions of existing devices.