FirstNet Innovation and Test Lab

State-of-the-art testing and innovation for public safety's dedicated network

Located at First Responder Network Authority's (FirstNet Authority) tech head-quarters in Boulder, Colorado, the FirstNet Innovation and Test Lab (FirstNet Lab) is a state-of-the-art laboratory in which the FirstNet Authority tests public safety functionality and features unique to the FirstNet network, including quality of service; priority; preemption; enhanced situational awareness technologies and applications; and future public safety functions, services and applications.

A test lab for public safety

The FirstNet Lab offers:

- **Technology validation.** In the FirstNet Lab state-of-the-art environment, the FirstNet Authority demonstrates how emerging technologies, devices and apps behave in a public safety broadband environment, ensuring anything that runs on the FirstNet network is truly public safety focused and ready for first responders' use. The FirstNet Lab also models and troubleshoots issues that may occur in the field.

In disasters and emergencies, first responders need communication tools that are tested and proven to work – consistently, securely, reliably and smoothly. That's where FirstNet's Innovation and Test Lab comes in.

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- **Quality of Service, Priority and Preemption (QPP).** The FirstNet network's QPP solution broke new ground in the industry. The FirstNet Lab plays a critical role in validating how QPP operates on the network. Public safety must be able to rely on a consistent user experience, priority access and preemption when needed.
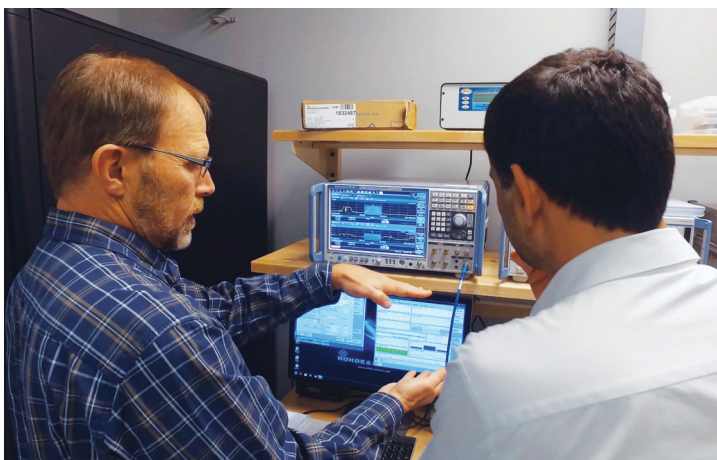
About the FirstNet network

FirstNet, the nationwide public safety broadband network, is a force-multiplier for public safety – giving them the modern communication tools they need to save lives and keep communities and first responders safe. The FirstNet Authority is responsible for ensuring the deployment, operation and maintenance of the FirstNet network. Through a public-private partnership with AT&T, the FirstNet Authority is delivering a reliable, hardened, secure broadband network dedicated to public safety. With the FirstNet network, for the first time, public-safety communications is based on commercial standards, realizes the benefits of consumer-driven economies of scale and is experiencing rapid evolution of advanced communication capabilities.

FirstNet Innovation and Test Lab

- **Innovation.** The FirstNet Lab is continuously engaged in setting up, configuring, testing and evaluating a variety of emerging network technologies, devices and apps to find new solutions that help public safety protect and secure communities across the nation. The FirstNet Authority also tests connected wearable devices and sensors (as known as the Internet of Things) for situational awareness applications to enhance public safety response and improve the operational picture.

- **Speed to solutions.** With a cooperative production and test environment in place, the FirstNet Authority's validation efforts reduce the time it takes to test and deploy vital public safety features across the FirstNet network – so innovative, effective communication tools are in the hands of first responders as soon as possible.

- **Collaboration and knowledge sharing.** In addition to the collaboration within the public private partnership with AT&T, the FirstNet Lab fosters collaboration and shares knowledge with the National Institute of Technology and Standards (NIST) Public Safety Communications Research (PSCR) Lab, also located in Boulder. The PSCR Lab has also provided expertise and capabilities in partnership with academia and industry to deliver innovations for public safety.

- **Learning and training opportunities.** The FirstNet Lab will be the technical foundation for a future experience program for hands-on public safety training, demonstration and user evaluation of FirstNet network technologies, devices and applications.

Built to the highest standards

The FirstNet Lab is a premier telecommunications technology innovation and test lab, built with the Telecommunications Industry Association (TIA) standards in mind. It has all the electrical power and network connectivity needed for FirstNet Authority to stage equipment and complete its own network validation and testing. The FirstNet Lab setup includes battery backup and a generator to maintain power for continuity of testing.

Learn more about the FirstNet Lab

The FirstNet Innovation and Test Lab enables next-generation communications technologies to be put in the hands of the nation's first responders quickly – at the level of quality and reliability they need. To learn more about the FirstNet Lab, go to www.firstnet.gov or contact us at info@firstnet.gov.

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