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## **Learn how MCPTT solutions on FirstNet improve public safety communications.**

Mission Critical Push-To-Talk solutions (MCPTT) offer FirstNet users enhanced group communications capabilities, delivering a familiar Land Mobile Radio (LMR) audio experience with situational awareness, video, and data-sharing capabilities through the FirstNet nationwide platform.



**Todd Early** is Director for the FirstNet Program at AT&T, and a former assistant chief with the Texas Department of Public Safety. In his previous role, Early oversaw management of

the statewide Law Enforcement Communications Operations & Communications Centers, statewide land-mobile radio (LMR) system, fleet operations, facilities management, and the Public Safety Solutions Center.

We recently interviewed Early about the challenges public safety professionals encounter and the tools they require. Here's what he had to say:

**Q: How are public safety communication strategies evolving, and why are agencies considering the integration of MCPTT solutions?**

**A:** First responders have long relied on Land Mobile Radio systems for group communication. These systems have been invaluable, providing reliable communication tools for emergencies and disasters.

However, as the demands on public safety evolve, so too do the tools that support them. One such way is through the integration of MCPTT solutions on FirstNet. These solutions offer features like nationwide coverage, interoperable communications, location, mapping, streaming video, and messaging capabilities that complement traditional LMR systems. The goal is to build upon the strengths of LMR.

**Q: How do LMR devices and those used for FirstNet MCPTT work together to enhance public safety communications?**

**A:** LMR systems have been the backbone of public safety communications for years, providing reliable, immediate group communication primarily through two-way radios. MCPTT solutions on FirstNet offer a complementary approach to these traditional systems. These solutions allow public safety agencies to build upon the immediate, reliable group communication of LMR systems while taking advantage of the extended reach and additional features of MCPTT solutions. This combination enhances public safety communications, ensuring that all necessary personnel can stay connected during emergencies.

**Q: What are some of the key features that differentiate MCPTT solutions on FirstNet from other communication solutions?**

**A:** One of the key features of MCPTT solutions on FirstNet is that they include data and video capabilities, not only push-to-talk voice. This can be vital in real-life situations where sharing all relevant information is critical. Think about maps of a disaster zone, the locations of first responders or images of missing persons.

With a push of a button, users can send streaming video from the scene to the Emergency Operations Center and to other personnel who need to make crucial decisions based on the situation. This level of situational awareness isn't possible with LMR alone. Location tracking is another key feature of MCPTT solutions on FirstNet. Public safety has made significant progress in tracking vehicle locations in the last decade. With FirstNet MCPTT solutions, Incident Command and dispatch can see a vehicle's location, as well as the first responder carrying their smartphone if they leave their vehicle.

**Q: So, anyone can send a text or video to a group on their smartphone today. Why would they use MCPTT on FirstNet to do things they're already doing?**

**A:** It boils down to usability and control and the priority they get on FirstNet. As a PTT user, you still need the ability to transmit and receive voice calls instantly. Texting or streaming a video enhances the experience. If you're responsible for an agency's communications, you want security and control. You need to be able to create talk groups and update user permissions centrally. And you'll want to limit your team's use of unsanctioned apps on the job and invest in services that you can better monitor – for the safety of the agency and the individual.

**Q: There are several broadband PTT services to choose from. Why should an agency choose MCPTT solutions on FirstNet?**

**A:** First, MCPTT solutions on FirstNet follow [3GPP Mission Critical] industry standards that ensure the service meets key performance metrics that

public safety demands. And these standards ensure longevity because there's an evolving ecosystem of devices, services, and network elements to meet those demands.

Its interoperability with LMR radio systems is also important so that agencies can leverage their existing investment while boosting their mutual aid capabilities and the ability to use a nationwide platform when needed.

But I'd say the main difference lies in the assurance of a public safety grade network and the priority you get on the FirstNet network. Non-FirstNet users may face delays or issues when sending information on a congested network. By contrast, FirstNet users get priority, ensuring they can transmit data even during network congestion. And our MCPTT services are network-integrated, where MCPTT traffic gets the highest priority level on the FirstNet network – other than mandated emergency calling – for even better reliability and better performance.

**Q: What sets FirstNet apart from other providers?**

**A:** FirstNet is the **only** nationwide network built with and for public safety, with **always-on** priority and, for first responders, preemption capabilities across voice and data. Plus, FirstNet is an all-band network. It uses all AT&T commercial bands plus a special lane of connectivity called Band 14, a high-quality spectrum specifically set aside for public safety. We can clear and lock this band during emergencies just for FirstNet users. And FirstNet offers 2.91 million square miles of coverage – over 250,000 square miles more than commercial networks.

Unlike other platforms, FirstNet is designed to address the specific needs of public safety, with direct feedback from public safety. It is also interoperable across agencies, allowing for seamless communication between different public safety organizations.

And one of the best things about FirstNet is its nationwide platform and coverage. That's important, because it lets responders communicate

even when they're outside their local coverage areas, allowing them to stay connected with their home base and other first responders when they need to.

**Q: How does MCPTT improve collaboration and teamwork during incident responses?**

**A:** In the past, public safety agencies faced challenges collaborating with other agencies at the same location, as they could not monitor each other's locations.

MCPTT allows first responders to communicate and collaborate more effectively during such incidents. By using location services and talk groups, responders from different agencies can be aware of each other's locations, enabling them to work more efficiently.

MCPTT's talk group capabilities allow first responders to establish local, regional, state, and national talk groups. This feature makes it easier for responders to work together, using the same methods they've employed in the land mobile radio world, now enhanced with FirstNet MCPTT.

**Q: What other teams besides law enforcement or fire can use MCPTT?**

**A:** One benefit of MCPTT is its use in telehealth – particularly in EMS services. It allows EMTs to communicate with the emergency room or doctor on duty, sharing information so the ER can be prepared to receive the patient.

In addition, FirstNet is available to those who support public safety, such as transportation and electric company workers, and those who clear roadways.

Similarly, MCPTT solutions enable communication between shelter operations and public safety. This coordination is crucial for providing aid to those affected by disasters.

MCPTT solutions are also helpful in school safety situations, as they enable communication between schools and public safety to help keep children safe during emergencies.

**Q: What factors should convince public safety agencies to adopt MCPTT technology?**



**A:** Having a trusted platform and technology that works when first responders need it is crucial. Change can be challenging. But the benefits of adopting MCPTT include enhanced communication, interoperability, national coverage and reduced cost.

In terms of cost, agencies using MCPTT solutions on FirstNet can transition from a capital expenditure model to an operational expenditure model because the network and platform are already in place. This shift allows for more efficient budgeting. Interoperability is essential. MCPTT solutions are

designed to complement land mobile radio systems. Public safety agencies want to ensure seamless communication between different disciplines and agencies. MCPTT solutions on FirstNet provide the necessary interoperability and capacity for effective communication.

Finally, confidence in the platform is vital. First responders need to know they have the highest level of priority on the network. The reliability of FirstNet MCPTT solutions gives public safety agencies the confidence to adopt this innovative technology. ■

