

FirstNet Authority Roadmap VOICE COMMUNICATIONS



Domain Overview

The FirstNet Authority recognizes that voice communications are the fundamental form of public safety communications, and as such, the FirstNet network provides priority and preemption for telephony voice services. AT&T will release a mission critical push-to-talk (MCPTT) service to FirstNet subscribers; however, the FirstNet network is built with the expectation that public safety will continue to rely on land mobile radio (LMR). The FirstNet Authority will ensure FirstNet voice capabilities are designed to interoperate with the thousands of LMR networks currently in use so that the promise of integrated voice, data, and video capabilities for public safety voice communications is realized.

The Vision

The FirstNet Authority envisions a nationwide network that provides high-quality, reliable voice communications, including push-to-talk, and leverages all available voice-related technologies to ensure the most advanced feature set is available.



Roadmap Priorities for Voice Communications

The FirstNet Authority assessed multiple factors to determine its Roadmap Priorities for Voice Communications.

These priorities will be developed into a series of initiatives that will direct the FirstNet Authority's efforts and drive its investments.



Work with public safety to assist in operationalizing FirstNet's MCPTT solution by educating on relevant use cases supporting efforts to establish relevant nationwide governance and policies.



Continue an active role in 3GPP and other relevant LMR-LTE standards development focused on MCPTT and dispatch advancement.



Advocate for continued implementation of critical MCPTT features such as device-to-device communications (ProSe), LMR-LTE interconnection, and dispatch capabilities.



Key Technology Areas that Comprise Voice Communications

- Mission-critical Push-to-talk (MCPTT): A standards-based, group-enabled PTT function that is designed for public safety's use of mission-critical voice communications.
- **MCPTT to LMR Interworking:** Ability for interworking of LMR systems with the FirstNet MCPTT solution.

Public Safety's Take on Voice Communications

- Broadband-based push-to-talk (PTT) solutions must be able to communicate with legacy systems (including dispatch consoles) and offer comparable features and performance.
- Responders will not consider FirstNet's PTT solution to be "mission critical capable" until it has been validated in real world scenarios.
- The public safety community foresees various governance, standards, and policy challenges with multi-agency use of MCPTT and expects the FirstNet Authority to assist in addressing them.



Public safety engagements that addressed Voice Communications (April 1 - June 30, 2019)

Key Takeaways from the FirstNet Authority's Analysis of Learnings from Stakeholders

- MCPTT advancements by FirstNet have contributed to a forthcoming product that public safety will begin to adopt.
- The introduction of MCPTT into existing public safety operations requires significant planning, training, and support to be successful.
- Key MCPTT features (i.e., direct mode, interconnection [including dispatch consoles]) will be monitored and continually refined to allow full adoption by public safety.









