

Roadmap Priorities for Voice Communications

The FirstNet Authority will prioritize the following areas in alignment with stakeholder contributions, evolving 3GPP standards, and the prioritized needs of other Roadmap domains.

- **Operationalize FirstNet PTT:** Work with public safety to assist in operationalizing the FirstNet PTT solution by educating on relevant use cases and supporting efforts to establish relevant nationwide governance and policies.
- **Active Role in Standards:** Continue to play an active role in emerging 3GPP and other relevant standards development focused on MCPTT, MCVideo, and MCDData, as well as dispatch advancement.
- **Critical Features:** Advocate for continued implementation of critical MCX features such as device-to-device communications, LMR-LTE interconnection, and dispatch capabilities based on public safety operational needs.

Key Technologies and Solutions that Impact Voice Communications

- **LMR-LTE Interconnect:** Technology that enables interworking of LMR systems with FirstNet PTT.
- **Mission Critical Push-to-Talk (inclusive of voice, video, and data):** A standards-based, group-enabled PTT voice, data, and video ecosystem that is designed for the acute demands of public safety.
- **Direct Mode:** Capability for devices to communicate directly between or among other devices without relying on central network infrastructure.

Public Safety's Take on Voice Communications

- MCPTT solutions must be able to communicate with legacy systems (including dispatch consoles) and offer comparable features and performance.
- First 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 FirstNet PTT and expects the FirstNet Authority to assist in addressing those.

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

- The FirstNet Authority has contributed significantly toward the initial introduction of FirstNet PTT, and the first responder community expects the FirstNet Authority's continued involvement as FirstNet PTT evolves.
- Crucial MCX features (e.g., direct mode; interconnection, including dispatch consoles) need the FirstNet Authority's continued engagement and active refinement to allow full adoption by public safety.
- Public safety envisions migration to LTE that is coexistent with LMR, requiring an economical, easy-to-implement interworking solution.



*Public safety engagements that addressed Voice Communications
(October 1, 2019 – September 30, 2020)*