

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of:)
)
Public Notice Regarding the Boulder) PS Docket 19-254
Regional Emergency Telephone)
Service Authority (BRETSA))
Petitions)
)
)
)

**COMMENTS OF
Minnesota Department of Public Safety
Emergency Communication Networks**

I. INTRODUCTION

The Emergency Communication Networks (ECN) Division of the Minnesota Department of Public Safety oversees the Statewide NG9-1-1 Program, the Allied Radio Matrix for Emergency Response (ARMER) statewide radio communications network, the statewide Wireless Broadband initiative in coordination with FirstNet, the Integrated Public Alert and Warning Systems (IPAWS), and the Interoperability Program, which is an overarching program to unify all the programs working together. Interoperability across all the programs is a driving force behind the organization.

The State of Minnesota regularly engages the statewide public safety community in defining rural, metro, state and tribal interoperable communications requirements and to identify gaps affecting local, regional and statewide interoperability. Through a robust and inclusive governance model, Minnesota, through the efforts of the ECN, guides activities and initiatives to advance public safety interoperable communications. In its role and responsibilities to the public safety community, the ECN is keenly aware of the

interoperability challenges faced by our public safety community and has devoted substantial human and capital resources to address this issue throughout the State.

In highlighting one key example of the State's objectives in advancing interoperable mission critical communications for public safety, Minnesota designed and deployed the ARMER network. The ARMER network is a robust, scalable, state-of-the-art land mobile radio (LMR) system that is capable of servicing the radio communications needs of every city, county, state agency, tribal government and non-government public safety entity operating in the State. The ARMER system is the fundamental infrastructure necessary for emergency responders to achieve seamless mission-critical interoperable voice communications.

II. BACKGROUND

In support of ARMER, the state conducted rigorous outreach with the statewide public safety community to define their requirements and subsequently committed to deploy the LMR network to satisfy these objectives to drive subscription. It took many years to build adoption to its current level, and throughout this outreach timeframe, ARMER has maintained and continues to support interoperability with other disparate radio networks to ensure broad-based interoperable communications. The experience with the ARMER network rollout and statewide adoption can be paralleled to the goals and objectives of FirstNet.

The ECN is aware that on July 6, 2018, The Colorado Public Safety Broadband Governing Body (CPSBGB) filed a request with the Commission for clarification on guidelines for commercial network interoperability for the Nationwide Public Safety Broadband Network (NPSBN).

On October 23, 2018, the Commission dismissed CPSBGB's request without prejudice.

On November 21, 2018, The Boulder Regional Emergency Telephone Service Authority ("BRETSA") filed a petition for reconsideration, or in the alternative, a petition for declaratory ruling and petition for rulemaking relating to the request for clarification by the CPSBGB.

On September 11, 2019, the Commission issued Public Notice DA 19-902 seeking comment on petitions filed by BRETSA.

In the sections below, the ECN addresses the issues raised in the Public Notice. The wording from the Public Notice is provided in *italics*, followed by comments by the ECN.

III. DECLARATORY RULING

The Public Notice seeks comment on BRETSA's request that the Commission issue a declaratory ruling to ensure that "interoperability is a fundamental responsibility of FirstNet and that FirstNet is supported at all levels including network, services, applications, and devices."

The ECN supports the request of the Commission to issue a declaratory ruling to confirm that interoperability is a fundamental responsibility of FirstNet.

The ECN has achieved statewide mission-critical voice interoperability via the ARMER system and continues to drive and maintain interoperability with disparate local, regional, and federal LMR networks. Minnesota actively advances the statewide Wireless Broadband initiative and envisions FirstNet as a central solution to provide mission-critical interoperable data communications, as well as supplemental voice communications. As such, and as envisioned by the creation of the Middle Class Tax

Relief and Job Creation Act of 2012, it is essential for FirstNet to provide seamless interoperability for all public safety users, including those using mission-critical two-way radio systems as well as other wireless broadband providers.

The ECN foresees at least two scenarios that support this conclusion. As previously stated, the State of Minnesota has achieved statewide mission-critical voice interoperability through use of the ARMER system. ARMER currently supports nearly 2,000 law enforcement, fire and EMS agencies throughout the State with over 96,000 registered users. When mission-critical push-to-talk (MCPTT) services are offered through FirstNet or other wireless broadband providers, these services will likely be used to supplement the voice services provided by ARMER. As a result, it is critical that interoperability exists between these multiple services to fully support the public safety mission.

ECN also considers it important to understand the interoperable features that will be supported with the proposed MCPTT solution. Some of the key voice interoperability features that must be considered include:

- Common talkgroups between the different services
- Voice coding algorithms
- Radio/Device IDs
- Priority settings (to be discussed further)
- Encryption (algorithms, end-to-end encryption, key management, etc.).

Additionally, survey research performed by the State indicates that all four nationwide wireless broadband service providers currently provide service to public safety agencies throughout the State. Public safety subscriptions to FirstNet are expanding, however, at the time of the survey, a large majority of public safety broadband subscriptions were with providers other than AT&T/FirstNet. As a result and considering a variety of other

factors, including cellular coverage advantages and limitations between carriers, service contracts, device funding and others, we anticipate that multiple commercial carriers will continue to provide wireless broadband service to the statewide public safety community for years to come.

Therefore, it is highly unlikely that a single broadband service provider will be providing push-to-talk (PTT) and other broadband data services to public safety agencies within Minnesota at any given time, or at the scene of any given multi-agency coordinated response. As a result, it is essential that interoperability of these services exist between broadband service providers, including FirstNet. The primary services that will require interoperability are likely to include push-to-talk, mission-critical push-to-talk, situational awareness and video applications, as well as others.

IV. NOTICE OF PROPOSED RULEMAKING/NOTICE OF INQUIRY

The Public Notice also seeks comment on BRETSA's request that the Commission issue a notice of proposed rulemaking or notice of inquiry to address "roaming and prioritization as it applies to applications such as [push-to-talk] and [mission-critical push-to-talk], as well as other applications that will face the same issues."

BRETSA also requested that the Commission address:

a) *The responsibility of providers other than FirstNet (i.e., providers of public safety land mobile radio (LMR) systems or services and public safety priority services offered over Commercial Mobile Radio Service (CMRS) networks) to cooperate with FirstNet in the development of interoperability solutions, and to provide full interoperability with FirstNet, LMR and other CMRS priority public safety services (subject only to technological limitations of a specific service)*

b) The issue of roaming and prioritization as applicable to LMR and other CMRS public safety priority services, and

c) The availability of Commission processes for dispute resolution as well as standards for dispute resolution concerning matters of interoperability, roaming and prioritization.

The ECN also supports the request for a notice of inquiry regarding roaming and the prioritization associated with push-to-talk and other applications. As explained above, the ECN envisions various scenarios where interoperability among wireless broadband service providers will be required in order to effectively coordinate and respond to a critical event requiring the support of multiple agencies. In these situations, it will likely be necessary to prioritize the most critical traffic during times of heavy network usage. Therefore, any interoperability solutions developed between service providers must include provisions to recognize and transfer priority settings associated with individual public safety users, groups, and/or applications. It will also be necessary to transfer priority settings between networks under roaming situations as well. Therefore, ECN believes that standards and agreements should be developed to facilitate the maintenance of priority settings during roaming.

The ECN also agrees that the interoperability of mission-critical services, including push-to-talk must be addressed both with LMR manufacturers and other Commercial Mobile Radio Service (CMRS) providers. The ECN notes that while LMR manufacturers appear to have embraced interoperability with LTE and are pursuing solutions, FirstNet and the other CMRS providers have not come to consensus on an approach.

Finally, the ECN would also appreciate having additional information regarding the Commissions proposed processes for interoperability oversight and dispute resolution as may be necessary as various solutions and agreements develop.

V. CONCLUSION

The ECN appreciates the opportunity to comment on these important issues. The ECN has long been a leader in pursuing public safety communications interoperability and also in the early preparation and adoption of broadband services for public safety. We look forward to continued discussion as well as identification of the next steps necessary to further enhance interoperability among public safety agencies and to provide all users with access to the most efficient and effective tools in support of their mission.