

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

In the Matter of)	
)	
Boulder Regional Emergency Telephone)	PS Docket No. 19-254
Service Authority Petitions)	
)	

**REPLY COMMENTS OF CHIEF (RET) HARLIN R. MCEWEN TO THE BOULDER
REGIONAL EMERGENCY TELEPHONE SERVICE AUTHORITY'S PETITIONS
FOR DECLARATORY RULING AND RULEMAKING**

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October 10, 2019

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Chief (Ret) Harlin R. McEwen submits these comments in response to the Public Notice seeking comment on the Boulder Regional Emergency Telephone Service Authority's (BRETSA) petitions for a declaratory ruling and rulemaking.

In 1978, the President of the International Association of Chiefs of Police (IACP) appointed me to serve as Chairman of the IACP Communications & Technology Committee. I was privileged to serve in this role until December 2015 (36 plus years) as the IACP law enforcement subject matter expert (SME) in matters related to communications & technology. For many years, I also served as the Communications and Technology Advisor to the Major Cities Police Chiefs Association (MCC), the Major County Sheriffs' Association (MCSA) and the National Sheriffs Association (NSA). In these roles I served as the lead national law enforcement SME on radio communications issues. It is with this unique perspective that I offer these comments.

I. Brief Account of the Long History Leading to Creation and Implementation of FirstNet

Starting in the early 1990s, representatives of several leading national public

safety organizations began to work diligently with the Congress and the FCC to advocate for increased public safety radio spectrum and solutions for the exchange of critical public safety data in addition to mission critical voice communications.

That work resulted in the Congress, in 1995, directing the FCC and NTIA to develop a plan to solve the public safety radio spectrum deficiency. As a result, the FCC and NTIA established the Public Safety Wireless Advisory Committee (PSWAC) to provide advice on specific public safety wireless communications requirements through the year 2010. I served on the PSWAC Steering Committee and in November 1996, the PSWAC Final Report recommended the allocation of 97.5 MHz of new public safety spectrum. In August 1997, in the Balanced Budget Act of 1997 (Public Law 105-33), the Congress directed the FCC to allocate to public safety 24 MHz of radio spectrum in the 700 MHz band (TV Channels 63, 64, 68, 69). In 1999, the FCC established the Public Safety National Coordination Committee (NCC) to recommend how that 24 MHz of 700 MHz band spectrum should be used. I also served as a member of the NCC Steering Committee, and in 2003 the NCC, in its final report, recommended that 12 MHz of the 700 MHz band spectrum be allocated for narrowband voice and 12 MHz of that spectrum be allocated for data. Although there is much more to this history, the basic fact is that the data portion of this 700 MHz band spectrum became the foundation for the eventual creation of FirstNet.

In June 2007, fifteen of the leading national public safety and state & local government organizations (AASHTO, AHA, APCO, FCCA, IACP, IAFC, ICMA, IMSA, NASEMSO, NASNA, NEMA, NENA, NFOP, NGA, and NSA) formed a not-for-profit organization called the Public Safety Spectrum Trust (PSST) and I was fortunate

enough to be elected Chairman of the PSST. On November 19, 2007, the FCC named the PSST as the nationwide Public Safety Broadband Licensee (PSBL) and issued the PSST a 10 year license for the 10 MHz data portion of the 700 MHz band public safety spectrum. This became half of the 20 MHz spectrum now known as Band 14.

Skip ahead to April 2009 when, after two years of frustrated efforts to define funding to build a nationwide public safety broadband network did not materialize, a meeting took place of the leading national public safety organizations to discuss next steps. This meeting resulted in the formation of the Public Safety Alliance (PSA), a broad coalition of national public safety and other state and local government organizations to advocate for allocation of the “D” Block (10 MHz of spectrum in the 700 MHz Band) to public safety and for funding to plan and implement a new Nationwide Public Safety Broadband Network (NPSBN).

On February 22, 2012, after more than three years of intense discussions with Congress and the Administration, President Obama signed the Middle Class Tax Relief and Job Creation Act of 2012 (Public Law 112-96). It included groundbreaking legislation for creation of the First Responder Network Authority (FirstNet), *an independent authority within the National Telecommunications and Information Administration (NTIA) at the U.S. Department of Commerce*, to develop and implement a new Nationwide Public Safety Broadband Network.

The 2012 Act directed the Chairman of the Commission to appoint members to a Technical Advisory Board for First Responder Interoperability (“Interoperability Board”) with the objectives of: (a) developing recommended minimum technical requirements to ensure a nationwide level of interoperability for the NPSBN, and (b)

submitting the minimum requirements to the Commission for approval. On June 12, 2012, the Commission fulfilled its responsibilities and adopted an order transmitting to the FirstNet Authority the recommended minimum technical requirements that the Interoperability Board submitted to the Commission on May 22, 2012.

On August 22, 2012, the Secretary of Commerce named the first board members of FirstNet and on November 7, 2012, FirstNet Chairman Sam Ginn announced his appointment of Chief Harlin McEwen as Chairman of the FirstNet Public Safety Advisory Committee (PSAC). The PSAC would eventually consist of 43 members representing all leading national public safety organizations as well state and local government organizations.

Starting in 2013, the PSAC began completing various assignments from FirstNet to advise the FirstNet board and staff on the preferred way to develop, implement, and operate the FirstNet NPSBN. During my tenure as PSAC Chairman (November 2012-April 2017), the PSAC developed numerous recommendations that advised the FirstNet Staff and Board on critical issues for public safety. Among those recommendations were issues relative to interoperability and the primary message to FirstNet was to follow the 2012 Act and maintain the **single** nationwide network structure of the NPSBN.

II. Brief History of Public Safety Interoperability Issues

For as long as I can remember, the public safety community has sought to solve the problem of interoperability within the Land Mobile Radio (LMR) environment.

Unfortunately the APCO P-25 project, one of the primary public safety efforts to bring interoperability to LMR systems, while helpful has resulted in limited

success.

Many years ago, it became abundantly clear to those who have long been involved with public safety communications issues that the efforts to reach total nationwide interoperability in LMR is not achievable. This is simply the result of thousands of disparate LMR systems that lack coordinated and sustained funding, and that face the constant efforts of vendors to improve their products to have better features than their competitors (good for public safety to have access to new technology but bad for public safety when the new features are not interoperable).

This background led many public safety leaders to seek a new and better way to achieve interoperability for future public safety communications systems, particularly broadband data options.

III. FirstNet/NPSBN Interoperability Issues

The implementation and operation of the FirstNet NPSBN must be viewed differently from LMR and the commercial mobile radio service (CMRS).

The reason Congress and the Administration supported public safety in creating the FirstNet NPSBN was to ensure a new level of nationwide interoperability not achievable in LMR. It is also clear that the 2012 Act directed that the NPSBN operate as a **single network** by requiring all the radio access networks (RANs) built under the FirstNet program be interoperable with the RANs built by any States or territories that might decide to opt out of the FirstNet proposed deployment. As has been explained by many, including the FirstNet Authority, “The 2012 Act neither mandates nor contemplates any requirement for the NPSBN to be interoperable with (or that the NPSBN core connect to) separate commercial or other third-party networks including, for example, land mobile radio (LMR) systems and commercial

radio service (CMRS) providers.”

IV. The FirstNet/NPSBN must stay true to the 2012 Act and its intent, and not stray from the Act and the vision of the national public safety community

As previously stated, the national leaders of the public safety community have acknowledged the challenges of achieving interoperability in the LMR world and purposely advocated for a different approach in the development and operation of the FirstNet/NPSBN.

First, it is critical that the FirstNet/NPSBN operate a **single** nationwide network and not a network of networks as suggested by some. Without this fundamental requirement, any other networks that might want to interoperate with the FirstNet/NPSBN would limit the ability of FirstNet and AT&T to implement new and evolving technology that would be incompatible with those other networks. This is one of the primary reasons LMR interoperability has been unachievable.

Second, the security of the FirstNet/NPSBN must be protected. There is a reason that operators of commercial networks in the CMRS have not connected their networks. Sure, there are competitive reasons, but the primary reason is that it poses severe security risks. In today’s environment we see networks being hacked and compromised on a daily basis and the risk increases significantly when networks are interconnected. All efforts must be made to protect the FirstNet/NPSBN from disruptive intrusions.

V. The FirstNet/NPSBN already provides greater interoperability than ever before achieved by public safety

It needs to be recognized that the significant, and ahead of schedule, implementation of the FirstNet/NPSBN that has already taken place has been of great value to the public safety community. Those public safety agencies and

personnel who have chosen to use FirstNet are already seeing the interoperability between agencies and disciplines we have never been able to achieve in the history of public safety communications.

There are many device and application options within the FirstNet/NPSBN that provide those who have chosen to use the FirstNet/NPSBN with many choices.

Various interoperability and connectivity options have been approved by FirstNet for use on the FirstNet/NPSBN.

In addition to the current primary FirstNet/NPSBN Push-To-Talk (PTT) option, FirstNet plans to offer additional network-based PTT options and has already approved several over-the-top PTT services for use on the FirstNet/NPSBN that allow interoperability with those using other networks. It allows users of FirstNet to PTT with users of other CMRS networks as well as LMR systems and many public safety agencies are using those services today.

VI. The well meaning intentions of BRETSA and its few public safety supporters must not be allowed to destroy the basic and critical founding principles of the FirstNet/NPSBN as supported by the 2012 Act.

For the reasons stated above, it should be obvious that BRETSA and its few public safety supporters do not understand the pitfalls and dangers of implementing the interoperability features it is requesting. Not only would it compromise the security of the FirstNet/NPSBN but it will also severely hamper the ability of the FirstNet Authority to implement the public safety specific applications being developed and to constantly upgrade the NPSBN.

The history of the mostly failed attempts to gain national LMR interoperability make it clear that we should not go down that path again. Interconnecting networks is not necessary to gain the interoperability the public safety community has been

advocating for many years.

VII. Conclusion

For the reasons stated above, the Commission should dismiss the BRETSA Petitions.

Respectfully submitted,



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