

**Before the
Department of Commerce
National Telecommunications and Information Administration**

In the Matter of)
)
Development of the Nationwide) Docket No. 120928505-2505-01
Interoperable Public Safety Broadband)
Network)

**COMMENTS OF THE NATIONAL ASSOCIATION OF TELECOMMUNICATIONS
OFFICERS AND ADVISORS, THE NATIONAL LEAGUE OF CITIES,
THE UNITED STATES CONFERENCE OF MAYORS, AND THE
NATIONAL ASSOCIATION OF COUNTIES**

I. Introduction

The National Association of Telecommunications Officers and Advisors (“NATOA”),¹ the National League of Cities (“NLC”),² the United States Conference of Mayors (“USCM”),³ and the National Association of Counties (“NACo”)⁴ (collectively, “commenters”) submit these

¹ NATOA is a national trade association that promotes local government interests in communications, and serves as a resource for local officials as they seek to promote communications infrastructure development.

² The NLC serves as a resource to and an advocate for the more than 19,000 cities, villages, and towns it represents.

³ The USCM is the official nonpartisan organization of cities with populations of 30,000 or more. There are 1,192 such cities in the country today. Each city is represented in the Conference by its chief elected official, the mayor.

⁴ NACo represents county governments, and provides essential services to the nation’s 3,068 counties.

comments in response to the Notice of Inquiry (“NOI”), released September 28, 2012, in the above-entitled proceeding.

II. Local Governments Play Vital Role in Deploying Public Safety Network

The Middle Class Tax Relief and Job Creation Act of 2012 (the “Act”)⁵ created the First Responder Network Authority (“FirstNet”) as an independent authority within the National Telecommunications and Information Administration (“NTIA”). FirstNet is tasked with taking “all actions necessary to ensure the building, deployment, and operation of the nationwide public safety broadband network, in consultation with Federal, State, tribal, and *local public safety entities . . .*”⁶ (Emphasis added.)

In the NOI, the NTIA states that FirstNet is responsible for “ensuring nationwide standards for use and access of the network; issuing open, transparent, and competitive requests for proposals (RFPs) to build, operate, and maintain the network; leveraging, to the maximum extent economically desirable, existing commercial wireless infrastructure to speed deployment of the network; and overseeing contracts with non-federal entities to build, operate, and maintain the network.” Of concern to commenters is the fact that the NOI fails to mention that the Act also requires FirstNet “to utilize, to the maximum extent economically desirable, existing . . . Federal, State, tribal, or *local* infrastructure.” (Emphasis added.)⁷

Local governments have an especially important role to play in the proposed network. Along with the fact that the majority of potential users of the network will be local government

⁵ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012) (Act) (codified at 47 U.S.C. § 1422).

⁶ 47 U.S.C. § 1426(b).

⁷ 47 U.S.C. § 1426(c)(3).

public safety employees, local governments have access to a tremendous amount of infrastructure, such as towers, fiber, and microwave facilities, that could greatly reduce the cost of the network and aid in speeding up the construction and deployment of the system. As such, commenters are concerned that the network architecture model discussed at the September 25, 2012 FirstNet board meeting appears to focus almost exclusively on commercial infrastructure. While encouraging commercial carrier participation to speed deployment is a worthy goal, we urge FirstNet to explore multiple build-out models, including those that seek to leverage the infrastructure assets of state, local, and tribal governments and other non-commercial entities, such as utilities. These assets have already been financed by tax- and rate- payers and may be available for use at low cost. In addition, the use of existing facilities may negate the necessity for or, at a minimum, streamline environmental review, zoning, and permitting processes.

Considering the fact that the Act provides only \$7 billion to construct the nationwide network, it is imperative that FirstNet maximize all available infrastructure – both public and private. It would be a mistake at this point in time to settle on a single nationwide model without examining other potential models that make creative use of public-private partnerships. Indeed, such models could have a positive effect on network costs. Since there is general agreement that \$7 billion in funding is inadequate, we need to find ways to inject more private sector money into the project while, at the same time, making sure what ever model is selected ensures the network will be affordable – both in terms of equipment and user fees - to local governments.

III. Local Control Needed Over Network Services

Commenters also voice our concern over the apparent lack of attention to the need for some measure of local control over network services. Because the vast majority of network uses will be in response to local incidents and by local first responders, local jurisdictions must have

direct control over many administrative functions of the network. Local jurisdictions are the most knowledgeable about their staff, roles, responsibilities, and assignments. Furthermore, they are more aware of internal policies and external relationships that can impact how a public safety user is deployed, managed, and reassigned during incidents. These functions should be reflected in network management and operations during an incident, to ensure effective control over user setup, provisioning, and priority assignment according to the user's role, responsibility, rank, device/application access rights, skills and certification history.

Local jurisdictions also need control over certain network operational functions, especially when large scale or multiple incidents involving a wide range of resources, applications, and assets are competing for resources. To effectively manage complex response operations, local and regional entities must have “hands on the knobs” control to establish priorities for managing staff, devices, applications, and incident access/priority through the local radio access network (“RAN”).

IV. Network Architecture/Models Require Incorporation of Local Resources

Slide 11 of the conceptual network architecture presentation made to the FirstNet board assumes that multiple terrestrial mobile partners will provide overlay coverage and service to support and enhance the FirstNet Band 14 network. However, such a model would require user devices capable of operating on the spectrum bands of each mobile partner. Devices with this capability are not currently available and research indicates that there may be both technical and market-based challenges to the development of such devices. Unfortunately, if devices are not readily available at an affordable price to operate on the network, this model will not work.

Commenters support the concept of devices that operate in multiple bands, but urge FirstNet to

do more research into what may be required to bring such devices to market within a reasonable time.

While commenters do not propose or support a particular network architecture or model, we believe the Farrill plan presents one workable technical model. However, we believe the Farrill plan can be improved by other models that effectively incorporate state, local and regional resources. In addition to existing public safety radio towers and sites, we encourage FirstNet to explore the use of publicly-owned dark fiber and broadband Institutional Networks (I-Nets) for backhaul connectivity. We believe many jurisdictions can make available municipal fiber and I-Nets at extremely low costs compared to commercial broadband alternatives. Municipal broadband alternatives will be especially cost effective for connecting local public safety answering points (PSAPs) and public safety dispatch centers to regional or state backhaul networks. Publicly owned broadband can also be instrumental in increasing redundancy and hardening of RAN sites by providing multiple paths to such sites, thus increasing the odds that the sites will remain operational in the event of a catastrophic disaster. In light of recent commercial service outages, such as those caused by the June 2012 derecho and Hurricane Sandy, the need for network redundancy and hardening cannot be overstated.⁸

Commenters also encourage the FirstNet board to closely examine current working models that effectively incorporate publicly-owned fiber and I-Nets to extend regional connectivity for public safety purposes. One example is the National Capitol Region Network (“NCRnet”) (<http://www.ncrnet.us/>). NCRnet has the objective of interconnecting 19 jurisdictions in the Washington, DC Metropolitan Area in a private, multi-functional fiber optic

⁸ See San Francisco Bay Area Regional Interoperable Communications Systems Authority (“BayRICS”) Comments, Docket No. 120928505-2505-01 (November 2, 2012).

network for public safety communications. As part of an effort to build and improve interoperability in the region, NCRnet was designed to connect existing NCR jurisdictional networks (many of them I-Nets) to form a secure and reliable cross-jurisdictional institutional network and minimize dependence on carrier and service provider networks. Local I-Nets are well suited to public safety communications. Their independence from commercial carrier lines assures a survivable network when commercial options are saturated. In addition, local government control allows flexible network design and end-to-end risk and security management.

Another valuable example of regional connectivity is One Maryland Inter-County Broadband Network (“OMBN”) (<http://onemaryland-icbn.org/>). Led by the Maryland Department of Information Technology with Howard County as a key partner, OMBN was granted \$115 million under the Recovery Act’s Broadband Technology Opportunities Program (“BTOP”) to build a high-speed fiber optic network that will directly connect 1,006 community anchor institutions and span 4,200 square miles across the State of Maryland. OMBN will touch every county in the state. According to the BTOP grant application, the project will result in over 1,200 miles of new fiber and incorporate over 2,400 miles of existing fiber and will provide direct fiber connections to approximately 260 public safety facilities in Maryland, enabling the upgrade to a Next Generation 911 system and improving interoperable communications.

These are but two examples of the many local and regional resources available that should be incorporated into the FirstNet model to facilitate local public safety agency connectivity and drastically reduce the costs of the network.

Furthermore, we encourage the FirstNet board to take a look at the early deployment of other public safety BTOP grant projects that involve workable business and technical models.

These projects can serve as real-world pilots and provide FirstNet with a wealth of information and best practices that can be integrated in the public safety network.

In addition, these projects can become incubators for new public safety applications by allowing developers to test their applications in live incident scenarios on a real-world network. However, these benefits will only be realized if the BTOP projects are allowed to proceed to their completion. Therefore, we encourage the NTIA and the FirstNet board to take action to lift the BTOP funding suspension as soon as possible to allow these BTOP grant recipients to continue their work and complete their early deployment projects. Quickly reinstating these projects will preserve the work accomplished and resources committed to date, provide an immediate infusion of millions of dollars in funding for the nationwide network infrastructure, and create test beds for robust application development and testing.

V. Conclusion

Commenters appreciate the opportunity to comment on the proposed nationwide public safety wireless broadband network and we look forward to working with the FirstNet board as this vital project progresses.

Respectfully submitted,



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