

Steps to Prepare for Public Safety Broadband

Title VI of the Middle Class Tax Relief and Job Creation Act of 2012 allocated spectrum for the creation of a nationwide broadband network dedicated to public safety communications—a major success for states’ efforts to achieve interoperable communications among first responders and the public safety community. The law dramatically changes the future of public safety communications by creating a public safety broadband network (PSBN) that will allow first responders and other public safety officials to share mission-critical data and eventually mission-critical voice communications.

Governors have an important role in building and operating the network and would be well served by taking a number of actions immediately even though the network’s governing authority and the holder of the license for the spectrum, the First Responder Network Authority (“FirstNet”), will not be seated until August 2012. FirstNet is responsible for the design, building, and ongoing operation of the network. As per the law, however, FirstNet must consult with state, local, regional, and tribal jurisdictions regarding a range of activities including construction or access to the core network and any radio access network (RAN), placement of towers, assignment of priority to local users, and training. The sooner states begin their preparation, the better situated they will be when FirstNet issues network requirements. The more knowledgeable states are of their own needs, the better they can inform FirstNet as it designs the network.

With this in mind, there are essential steps states can take now to prepare that include the following:

Convene a multidisciplinary advisory group on broadband. Among the first major actions a governor must take is determining how decisions regarding public safety broadband will be made within a state. Those decisions relate to managing federal funds, designing business processes within the state, and establishing mission requirements, what is sometimes referred to as the “statement of requirements” (SoR). It may be premature, however, to put in place either an officer or commission because many of the decisions to be made by FirstNet could affect a state’s choice about governance structures. A preparatory step governors can take is convening an internal advisory group that will comprise senior policy advisors and cabinet officials to track developments and oversee state preparations. Such a group could be made responsible for overseeing many of the other steps states must take to be ready to act once FirstNet is in place.

Members of this advisory group should have the following backgrounds.

Chief Information Officers (CIOs). Although the role and responsibilities of CIOs vary to some extent by state, CIOs generally lead their states in developing and operating communications and information systems and thus have the experience and enterprise-wide view that will be essential to broadband deployment.

Chief Technology Officers (CTOs) and Chief Information Security Officers (CISOs). CTOs and CISOs lead their state’s technical development and operation of networks and have responsibility for

and experience in network development, procurement, and implementation of security safeguards.

Homeland Security Advisors (HSAs). HSAs lead their states' homeland security enterprises. Although their role and operational responsibilities vary by state, HSAs will bring a critical perspective to the development of the network.

Emergency Managers (EMs). EMs lead their state's response to disasters. Their standing in the first responder community and their tactical understanding of network mission requirements are critical.

State Police. State police are often responsible for a state's existing public safety networks and, thus, their input is imperative.

Statewide Interoperability Coordinators (SWICs). SWICs work with emergency response leaders at all levels of government to implement the statewide communication interoperability plan (SCIP) for radio communications.

State Fire and EMS Officials. Fire and EMS personnel will be major consumers of network services and also major contributors. Their understanding of mission requirements is critical.

Public Utilities Commissioners. Public utilities commissioners regulate utility services, including energy, telecommunications, and water, and are responsible for assuring those services are reliably provided and available to consumers at reasonable rates. Their role in regulating telecommunications systems suggests that their input will be essential as well.

State Budget Officers. Funding the network will be complicated both initially and over time suggesting that early participation by state budget officers could be useful to implementing successful funding strategies.

State Health Officials. State health officials operate many public health information systems that support states' public safety missions. It is important to ensure that those systems are factored into the business design of the network.

Ensure the participation of the public safety community in design, operation, and governance. The nationwide network should be first and foremost a public safety network linking law enforcement, emergency management, fire, corrections, and emergency medical services (EMS). Although the network may eventually be used for other purposes, public safety considerations in design, operation, and governance must be kept paramount from the outset.

Governors need to ensure that the design of the network directly reflects the priorities of the public safety community by including its members in governors' advisory and technical design groups. One area where the public safety community's input will be essential is in ranking or prioritizing users' access during major events. For example, during the events of 9/11, many citizens using commercial wireless services were unable to place or receive calls because too many people were trying to use the system at the same time. The resulting gridlock paralyzed communications for many individuals. Although the nationwide network will not be a commercially available network, the challenge of gridlock during a major event remains. Prioritization will avoid network gridlock by ensuring that first responders and other key public safety officials are able to access the system ahead of "lower" priority users during times of high demand, such as in a crisis situation. Unlike the prioritization of public safety over public users on commercial systems, the challenge here will be prioritizing access among public safety officials at varying levels and units of government.

The changing and evolving mission requirements of the public safety community will also need to be continually reflected in the network's ongoing operations. For example, new technologies or data sources may

redefine key aspects of how the public safety community wants the system to work within a state. Input from public safety users on these types of mission requirements will contribute to the efficient operation of the system in the long run.

Finally, governors need to ensure that the interests of law enforcement, fire, and EMS officials are adequately represented in governance and ongoing decision making. As noted above, governance issues will not be fully resolved until after FirstNet issues its guidelines. However, for the network to be successful, states will need to include the public safety and first responder community in governance and decision making processes.

Build partnerships with local governments, special regions, and key associations. Governors must consider the unique needs of local governments, special regions, and key state associations in planning for the broadband network. Examples of those interests include county managers and executives, mayors, urban area security initiatives (UASI) jurisdictions, state chiefs of police, fire, and EMS associations. Each of those will play an important role in terms of the ultimate success of the network. Their perspective will be essential. Engaging them early in planning and preparation phases will help ensure their support.

Engage Tribal Nations. Tribal nations will be able to make many of their own decisions about their participation in the nationwide network and the advice offered to governors to begin planning applies to the leaders of tribal nations as well. To improve planning and reduce duplicative efforts, states with recognized tribal nations will need to either factor in or directly reach out to the tribes to enhance their planning efforts. Given the limited resources of many tribes, decision making may take longer, and states will need to factor this into their planning processes.

Engage the private sector and utilities. Each state will need to determine the role that private sector companies and utilities should play in network build

out and operation. As with the recommendations described above, many of the decisions and actions that states need to take will be contingent on the guidance issued by FirstNet. Some states could find it advantageous to keep the private sector and utilities involved in ongoing discussions and planning, but for others involvement may not be appropriate at this time. That decision will need to be based on a range of factors, such as a state's infrastructure and the role of the public utility commission. In either case, FirstNet will need to consult with states regarding this.

Assess your state's assets. As states prepare for broadband build out, they need an accurate understanding of their existing infrastructure used to provide communications for public safety users and the state, local, and tribal levels. That can also include knowing what assets are available within commercial networks. Among the assets to be inventoried are towers and the capacity to handle communications between towers and the core of the network (fiber and microwave "backhaul"). That type of information will be important for consulting with FirstNet on the design and building of the network.

Much of the necessary information might already be available at the state and local levels, but states will need to compile it into a usable and accessible format to ensure a comprehensive overview of their capabilities to support the new broadband network. Additionally, states should be aware of ongoing communication projects and may want to reexamine those efforts in light of the nationwide system.

Establish security practices and rules governing access to information. When deployed, the network will allow remote access to tremendous amounts of critical and sensitive information and communications from around the nation. Although FirstNet will be responsible for establishing overall security for the network, states still need to ensure from the inception that appropriate safeguards are "baked" into the system at their end. Among the questions states need to consider are:

What happens if a public safety cell phone or tablet is lost or stolen? How do system operators ensure that information is shared only with individuals with the appropriate authorization and under the right circumstances? And, how do states ensure accountability within the system?

Ensure that the state's procurement and contracting rules and regulations allow for the turnaround times specified in the law. The legislation that authorizes the nationwide network also includes very specific time frames. For example, states will only have 90 days to respond to the system requirements issued by FirstNet and 180 to issue their own request for proposals (RFPs) if they decide to opt-out. Meeting the deadline could require issuing RFPs more quickly than usual and final-

izing contracts in a streamlined process. However, the challenge is that some states' procurement and contracting guidelines may prohibit them from moving at the pace required by the federal law.

States need to examine the key elements and timeframes set forth by the law against their own procurement and contracting guidelines. A fundamental question is: Does a state even have the authority to enter into a contract or issue an RFP under such conditions? States will need to complete their assessments of contracting authority well in advance of FirstNet to avoid any downstream issues. In some extreme case remedying problems with contracting authority could require legislative action, which is itself a lengthy process.

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