



**Public Comments in response to the Request for Information
National Telecommunications and Information Administration
[Docket No: 120509050-1050-01]
RIN 0660-XC001
Development of the State and Local Implementation Grant Program for the
Nationwide Public Safety Broadband Network**

June 15, 2012

National Telecommunications and Information Administration
U.S. Department of Commerce
HCHB Room 4812
1401 Constitution Avenue NW
Washington, DC 20230

Ventera Corporation appreciates the opportunity to provide comments to the NTIA on the above referenced State and Local Implementation Grant Program. Ventera Corporation has extensive background in the area of spectrum management, wireless network planning and deployment, program and project management, and system development supporting the automation and data management needs of these functions. The scale and scope of this undertaking to provide a Nationwide Public Safety Broadband Network (PSBN) with full interoperability establishes significant challenges for FirstNet if it is to reach its' mandated objectives. The directive for the PSBN to be based on a single, national network architecture is essential for addressing network interoperability and future enhancements. This model is similar to the approaches utilized by wireless telecommunications providers in their network deployments. The model does vary significantly, however, in the challenges of addressing the multiple State, local, and tribal participants as well as the providing service to a broad number of first responder agencies, such as police departments, fire departments, and emergency response teams to name a few. The PSBN will also require a more ubiquitous network solution than any prior network has achieved. If FirstNet is to be successful in deploying the PSBN it will require a significant amount of collaboration, standardization, and accountability across these many constituencies. We believe it is essential for FirstNet to define the standard formats and platforms for the information to be gathered in the Consultation Process as the multiple State, local and tribal groups are contacted. We also see

tremendous value on providing an infrastructure and standardization for extending that collaboration and information sharing through the Build Out Process. Our comments are directed primarily at these areas that will enable transparency, collaboration, seamless and efficient data management, and communication of the requirements.

Based on best practices within the commercial carrier industry, we feel that FirstNet would benefit from standing up a “portal” that would provide FirstNet, the FCC, State, local, tribal participants, and other key contributors the ability to communicate and share data in a standard format. Some of the functionality that would be supported via this portal is:

- **National Site Location Database** – Allow for each agency to submit the assets that could be leveraged in the PSBN deployment. FirstNet would have the ability to conduct its planning best utilizing existing assets without costly site acquisition and survey costs.
- **Vendor Management** – Centralize the RFP submission and procurement processes for engaging the various engineering and network build vendors.
- **Spectrum Management** – Track what spectrum is associated with the different grants, provide coordination, and centralize the spectrum application process.
- **Execution Tracking** – Track and communicate the progress of all the various state deployments.
- **Centralized Reporting** – Provide insight on the Grantees progress on meeting their obligations for turning up the network, the results of the program and network coverage as systems are turned up.

The foundation of this type of solution would need to provide the security infrastructure to ensure data integrity and security by controlling what groups and individuals have access to specific data. The more an enterprise approach is considered the more efficiently FirstNet will be able to manage the data and share it with all the key participants.

The Consultation Process

1. **Section 6206(c)(2) of the Act directs FirstNet to consult with regional, State, tribal, and local jurisdictions about the distribution and expenditure of any amounts required to carry out the network policies that it is charged with establishing. This section enumerates several areas for consultation, including: (i) Construction of a core network and any radio access network build-out; (ii) placement of towers; (iii) coverage areas if the network, whether at the regional, State, tribal, or local level; (iv) adequacy of hardening, security, reliability, and resiliency requirements; (v) assignment of priority to local users; (vi) assignment of priority and selections of entities seeking access to or use of the nationwide public safety interoperable broadband network; and (vii) training needs of local users. What steps should States take to prepare to consult with FirstNet regarding these issues?**

Response:

- a. **What data should States compile for the consultation process with FirstNet?**

Response: States should provide FirstNet with all the assets that could be leveraged in building out the PSBN. This would include all available infrastructure elements such as towers, structures and transport networks. This information would include such information such as location, available tower space, key site characteristics, underlying ownership/lease arrangements and more. Making this information available via a centralized database that standardizes the information will allow FirstNet to have ready access to data required design a network plan and reduce costs associated to procuring tower space on commercially available assets.

b. No Comment

2. The Act requires that each State certify in its application for grant funds that the State has designated a single officer or governmental body to serve as the coordinator of implementation of the grant funds.

a. No Comment

b. No Comment

c. How should the States plan to involve the local entities in the State and Local Implementation grant program?

Response: Through a central “portal”, States should have the ability to collaborate with key local entities. The State entity should be able to disseminate information via this “portal.” Through security permissions, local entities should be able to submit and maintain key data in a normalized and standard format for the State entity to consume or evaluate.

d. How should the States plan to involve the tribal entities in the grant program?

Response: The tribal entities should be treated the same way as any local entity with their ability to submit data to the State entity via the “portal.”

e. What requirements should be included in the grant program to ensure that local and tribal public safety entities are able to participate in the planning process?

Response: The local and tribal entities should be able to access their own proprietary portion of the “portal.” There should be requirements that support the State entities to communicate via this portal and allow the local and tribal entities to be part of the review and decision aspects of the planning process. Planning and deployment scoping documents should be made available to the local and tribal entities via the “portal.” The portal should also be used to collect feedback and capture planning approvals.

f. How should the State and Local Implementation grant program ensure that all public safety disciplines (e.g., Police, sheriffs, fire, and EMS) have input into the State consultation process?

Response: These disciplines should have access to the process via the “portal.” They should have access to information associated with the deployment of the PSBN, reviewing and approving elements of the plan that affect their systems, providing data into the process, and receiving program related information.

g. No Comment

h. No Comment

- 3. The Act contemplates that FirstNet will consult with States regarding existing infrastructure within their boundaries, tower placements, and network coverage, which FirstNet can use to develop the requests for proposals called for by the Act. The States, however, will need time and funding to collect the necessary information before they are ready to consult with FirstNet.**

- a. Given these inter-related activities how should the State and Local Implementation grant program be used by States to assist in gathering the information to consult with FirstNet?**

Response: FirstNet should use the “portal” to collect and maintain a nationwide site database. Each State entity should have the ability to maintain their respective site location and network coverage information in the “portal.” This solution would serve two purposes. First, the States would have direct access to provide the required information to FirstNet. The States could also enable their local and tribal entities to have access to provide this information. This solution would streamline the process and reduce cycle times to collect, compile, and maintain the information. Second, FirstNet would have all the collected information in a consistent and usable format. FirstNet would not have to spend the overhead managing and manipulating the data.

- b. Should consistent standards and processes be used by all States to gather this information? If so, how should those policies and standards be established? What should policies and standards be?**

Response: Yes. The “portal” would support standards and processes through automation and application validation rules. The “portal” could enforce data such as tower and site location format, ownership and access rights, for example.

- c. No Comment**

Existing Public Safety Governance and Planning Authorities

- 4. No Comment**

Leveraging Existing Infrastructure

- 5. How should States and local jurisdictions best leverage their existing infrastructure assets and resources for use and integration with the nationwide public safety broadband network?**

Response: The “portal” will provide a means for States and local jurisdictions to identify and list any such existing assets for support of network deployment including structures to support antennae, fiber availability, and power availability, both primary and backup.

- a. How should States and local jurisdictions plan to use and/or determine the suitability of their existing infrastructure and equipment for integration into the public safety broadband network?**

Response: Specifications can be provided for cell site loading by type of cell site (*e.g.*, macro or small cell), power requirements and backhaul bandwidth needs. These specifications need to estimate not only the launch requirements but reasonably anticipated growth requirements as the network evolves.

- b. No Comment
- c. **How will States include utilities or other interested third parties in their planning activities?**

Response: By providing access to the “portal” and guidelines for input and timing, the participation by these other groups can be leveraged. Utilities and other interested parties could provide their network assets into the potential inventory. They would be able to uniquely identify their specific assets and any factors such as physical access, costs, and other factors that should be taken into account as FirstNet evaluates how to leverage these assets in the PSBN design.

- d. **Should NTIA encourage planning for the formation and use of public/private partnerships in the deployment of the nationwide public safety broadband network? If so, how?**

Response: Yes. Since the public sector does not have the essential skills and resources for the deployment of the PSBN, public/private partnerships can be leveraged in the design, development and deployment. They can also serve a very useful purpose in the development of the hardware, applications and devices that will be needed to make the PSBN a viable option for all first responders.

- 6. **Section 6206(b)(1)(B) of the Act directs FirstNet to issue open, transparent, and competitive requests for proposals (RFPs) to private sector entities for the purposes of building operating, and maintaining the network. How can Federal, State, tribal, and local infrastructure gets incorporated into this model?**

Response: Utilizing the “portal” can provide the means to incorporate the data surrounding existing infrastructure. Sufficient data to ensure the most operational, economical and technically feasible solutions should be obtained.

- a. **How would States plan for this integration?**

Response: RFP responses would need to be managed at whatever local or regional level is appropriate for the organizational structure of FirstNet. States need to enable the local jurisdictions to accommodate the integration by assisting in eliminating roadblocks or local challenges to the building, operating, and maintaining of the network. The review and collaboration should be supported by the “portal.” Using the “portal” to support the flow of communication, FirstNet will be able to quickly and efficiently involve key stakeholders in the process and be able to expose specific data elements around performance to ensure transparency in the process.

- b. **Should States serve as clearinghouses or one-stop shops where entities bidding to build and operate portions of the FirstNet network can obtain access to resources such as towers and backhaul networks? If so, what would be involved in setting up such clearinghouses?**

Response: No, development of a “portal” as outlined previously can provide the access to all resources with the proper security access. Any concept of clearinghouse should be driven by FirstNet on a national standard to enforce compatibility and interoperability of the network. Building an interoperable network require significant standardization from a technology and design perspective. Commercial carriers’ best practices allow them to

provide autonomy in the build and maintenance responsibilities down to the local leadership, but have national influence on the network design, technology standards, vendor and service level agreement management, and data management. This governance structure has proven to keep costs down by consolidating some responsibility to a smaller national reaching group and ensure seamless network coverage for its customer base.

- c. No Comment

State and Local Implementation Grant Activities

- 7. No Comment
- 8. No Comment
- 9. No Comment
- 10. No Comment
- 11. No Comment
- 12. No Comment
- 13. No Comment

- 14. **The U.S. Department of Homeland Security’s Office of Emergency Communications (OEC) has developed the following tools through its Technical Assistance Program available at <http://publicsafetytools.info>, including: (1) Mobile Data Usage and Survey Tool- Survey process to document the current-state mobile data environment, in preparation for a migration to LTE; (2) Statewide Broadband Planning Tool- Template and support on Statewide strategic broadband planning issues designed to serve as an addendum to the SCIP; (3) Frequency Mapping Tool- Graphical tool to display FCC license information and locations including cellular sites within a jurisdiction; and (4) Communications Assets Survey and Mapping Tool (CASM)- Data collection and analysis tool for exiting land mobile radio assets. Should States be encouraged to utilize tools and support available from Federal programs such as those developed by OEC? Are there other programs or tools that should be considered?**

Response: These tools were not reviewed in detail but there are various commercially available tools for network design and planning that should be considered once decisions are made about the timing and process of consultation.

- 15. No Comment

State Funding and Performance Requirements

- 16. No Comment
- 17. No Comment
- 18. No Comment

Other

19. No Comment

We appreciate the opportunity to provide these comments regarding this important initiative for the development of the PSBN. Should you have any questions or require additional information our contact information is provided below.

Sincerely,

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