NORTH CAROLINA'S RESPONSE TO THE REQUEST FOR COMMENT BY THE NTIA

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 of 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 selection 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?

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

Complete inventory of existing network infrastructure, providers and services. It is essential that FirstNet releases guidelines as to the types of information that need to be gathered and the submission format, prior to the consultation visit.

The items below are just examples as to what might be included:

1) Profile of Utilities & Communications, fiber optics (type, routing, etc.), major telecommunication companies, towers (type, height, fiber connection, availability, site facilities, Broadband (served, underserved and unserved):
2) Profile of Counties, Cities, Tribes: Location, population, agencies (police, fire, EMS, etc.), potential users; sworn officers, certified fire and EMS personnel, Telecommunication Networks and Infrastructures;
3) State Mapping;
4) Internet Hubs and Providers;
5) Identification of needs/requirements (applications & devices) that are not being met by existing data networks including commercial carriers, projecting out 5 years;
6) Estimation of capacity requirements such as S/P GWs, fiber connectivity, utilization of core services & resources;
7) Coverage areas and prioritization of those areas during the build-out phase; coverage areas in part determine tower sites (search rings); target signal strength contours and capacity goals; plans for how to scale up capacity over time;
8) Specific sites within search rings as prioritized by lease cost or TCO if owned by municipality);
9) State of NC will (may) offer requirements or expectations for the 'core' and services offered by FirstNet;
10) What are the needs for geo-redundancy and communication path resilience;
11) End user device distribution and management models and needs;
12) What QoS prioritization objectives are there and what preemption and exception needs can be used
13) Inventory of public and private sector assets that might possibly be used for a NC implementation;
14) Identification of possible economic and cost recovery models or arrangements might be employed;
15) Identification or affordability targets for per user fee models;
16) Prioritized requirements for any and all security needs;
17) Feasibility, availability and timing of State of NC 20% matching funds;
18) Inventory all public owned towers to save on lease costs.
19) Identify all Lease/Rent & Maintenance reoccurring cost for existing infrastructure for both OPEX cost analysis or even possible opportunity cost savings that an alternative approach may provide.

b. Should this activity be covered by the State and Local Implementation grant program?

Yes.

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. Who might serve in the role as a single officer within the State and will it or should it vary for each State?

The Chief Information Officer of the State or a designated Executive director reporting to the SCIO. Given that the FirstNet goal is to leverage existing networking infrastructures across the state the coordinator will need to have broad networking authorities and the staff to figure out how to best leverage existing resources.

The National Broadband Network should be addressed as an enterprise area network with emphasis on the security and integrity of the data. Each State should be able to operate all their criminal justice and public safety applications on this network infrastructure with complete assurance that it meets all the quality standards of a secure network and all requirements imposed by federal authority for security of information.

b. Who might serve on the governmental body (*e.g.,* public partners, private partners, technical experts, Chief Information Officers, SWIC, finance officials, or legal experts)?

Broad representation from all affected parties but any such must be a reasonable size and not significantly large. At the state level, the governing board should be similar to the National Board. Local counties and municipalities must be given ample opportunity for input and be part of the board composition. Local Subject Matter Experts (SMEs) should also be part of any working groups.

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

Through proper composition and representation on the state governing board. North Carolina local governments are represented by associations, as are various public safety interests. These entities have traditionally done an outstanding job in disseminating information to their constituents. Examples include grant workshops conducted in key locations throughout the state, and use of video conferencing network operated by the community colleges for creating public awareness programs.

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

Similar process to counties and cities.

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?

The state governing board should contain representatives appointed by their associations; members should be selected from different types of areas.

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?

Each one of the public safety disciplines have an association or organization that represent their interest, the associations would be requested to appoint members to participate, the use of focus groups could also be used in key locations and with each of the disciplines

g. How should the State and Local Implementation grant program define regional (e.g., interstate or intrastate) and how might the grant program be structured to facilitate regional participation through the States?

Some states have information sharing systems that are interstate; each regional system has a governance board; therefore, these boards could be briefed and they would disseminate the information, followed up by workshops. For example, North Carolina has MOUs with Virginia and South Carolina. Geographical location should drive regional cooperation.

h. How should States plan to involve the Federal users and entities located within their States in the grant program?

Federal agencies will be included in a similar manner as the state, local, and tribal entities. Another possibility will be to be represented by the Governor's federal liaison.

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 interrelated activities, how should the State and Local Implementation grant program be used by States to assist in gathering the information to consult with FirstNet?

Existing infrastructure comprises assets held or used by public entities such as state agencies and local governments, as well as assets of telecommunications providers or other companies. The state entity referred to above will need sufficient authority to require owners and operators of such assets to provide infrastructure information and to use such information to assist FirstNet in the grant program.

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 those policies and standards be?

Yes. Established with input from the states. They must include language granting authority to a state entity to collect all data necessary. Any confidentiality matter must be addressed by the NTIA rules.

c. What time period should NTIA consider for States to perform activities allowed under the grant program as it relates to gathering the information to consult with FirstNet?

It will vary based on state size and volume of data. Without having the standard assessment template, it is very hard to estimate.

<u>Existing Public Safety Governance and Planning Authorities</u>

4. Over the years, States have invested resources to conduct planning and to create governance structures around interoperable communications focused primarily on Land Mobile Radio (LMR) voice communications, including the Statewide interoperability Coordinators (SWIC) and Statewide Interoperability Governing Bodies (SIGB), often called Statewide Interoperability Executive Committees (SIEC).

a. What is the current role of these existing governance structures in the planning and development of wireless public safety broadband networks?

No role to our knowledge.

b. What actions have the States' governance structures (*e.g.*, SWIC, SIGB, or SIEC) taken to begin planning for the implementation of the nationwide public safety broadband network?

The SWIC and SIGB have played a fairly limited with our Charlotte LTE program.

c. Can these existing governance structures be used for the PSBN, and if so, how might they need to change or evolve to handle issues associated with broadband access through the Long Term Evolution (LTE) technology platform?

Some of the emerging work and analysis from the early LTE adopters and their vendors demonstrate that workflows, devices processes and business processes related to LTE operations differ from LMR operations. The state anticipates a recommendation to modify or redesign processes specifically for LTE. Such recommendation should provide states with solid guidance on information needed or collected for planning purposes. It will also confirm that this effort is broader than an LMR perspective.

The technologies enabling FirstNet are an overarching and sophisticated solution set which will require the involvement of IT Directors/CIOs across the state, in addition to public safety officials. These technologies are very IP networking intensive, but cellular in origin and not at all similar to Wi-Fi or P25.

As such SWIC role is critical stakeholder. However, the program is much broader than the SWIC role might encompass. Checks & balances between organizations include: executive leadership and oversight, Public Safety executives as the primary stakeholders & customers, finance and procurement separated out (separation of duties).

The referenced governance structures have concentrated on voice communications. North Carolina also has a Criminal Justice Information Network (CJIN) Governing Board that has a solid history of handling governance of statewide criminal justice and public safety systems; fingerprinting, warrants, e-citation, juvenile justice, electronic discovery, e-courts, private mobile data, the initial voice communications, etc. It is a 21 member board that has broad representation. The Board has successfully handled millions of dollars' worth of grants to build out all the aforementioned statewide projects.

d. What is or should be the role of the Statewide Communications Interoperability Plans (SCIPs) in a State's planning efforts for the nationwide public safety broadband network?

To be determined pursuant to the state governing board.

e. What actions do the States need to take to update the SCIPs to include broadband?

The state governing board should have the flexibility to determine that.

f. Should the costs to change or evolve existing governance and Statewide Plans be eligible in the new program?

The state governing board should have the flexibility to determine that.

g. Should the maintenance of those existing governance bodies and plans be eligible in State and Local Implementation grant program?

The state governing board should have the flexibility to determine that.

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?

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?

Identify the existing components and validate compliance to national design and architecture.

b. What technical resources do States have available to assist with deployment of the nationwide public safety broadband network?

Available resources will vary by location, but ultimately there will be a need to permanently hire a certain number of technical resources for continuity purposes. Existing resources, if any, should be used in consultation since they most likely have a current job.

c. How will States include utilities or other interested third parties in their planning activities?
North Carolina will seek out 3rd party interests, private sector entities, and regulatory agencies for their input into existing infrastructure resources.

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?

Most definitely, through providing flexibility to the states.

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 get incorporated into this model?

a. How would States plan for this integration?

Through representation on the state governing board and participation in work groups reporting to the board.

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?

Yes. A structure to allow such clearinghouses must be defined as part of the design and it needs to be consistent.

c. Should setting up a clearinghouse be an eligible cost of the grant program?

Yes.

<u>State and Local Implementation Grant Activities</u>

7. What are some of the best practices, if any, from existing telecommunications or public safety grant programs that NTIA should consider adopting for the State and Local Implementation grant program?

The North Carolina E-NC Authority was among the first to produce a state broadband map. It included state officials (including the State CIO), provider representatives and local participants.

Another successful reference is the CJIN board, referred to earlier.

8. What type of activities should be allowable under the State and Local Implementation grant program?

Personnel costs, planning costs, assessments, training, awareness forums and meetings.

9. What types of costs should be eligible for funding under the State and Local Implementation grant program (*e.g.*, personnel, planning meetings, development/upgrades of plans, or assessments)?

All of the above.

a. Should data gathering on current broadband and mobile data infrastructure be considered an allowable cost?

Yes, most definitely.

b. Should the State and Local Implementation grant program fund any new positions at the State, local, or tribal level that may be needed to support the work to plan for the nationwide public safety broadband network? If so, what, if any, restrictions should NTIA consider placing on the scope of hiring and the type of positions that may be funded under the grant program?

New positions are certainly necessary. It is also likely that some existing positions should be modified to incorporate new duties. Both actions should necessitate additional funding. Technical positions will necessarily include professional certifications or licenses as well as industry recognized certifications. Such certifications should be required in positions where appropriate. Also, provide expert deployment consultants to spread knowledge and assist areas in steps to move forward.

10. What factors should NTIA consider in prioritizing grants for activities that ensure coverage in rural as well as urban areas?
A priority factor should be given to rural and high cost areas. Might want to consider the waterfall or domino approach. Go after the quick infrastructure deployments to provide immediate benefits and the realization of those surrounding areas will more easily domino/waterfall into easier deployments as they link into the earlier deployments.

11. Are there best practices used in other telecommunications or public safety grant programs to ensure investments in rural areas that could be used in the State and Local Implementation grant program?

BTOP process worked well. Also another area where creative incentives were made available to providers so they might extend networking offerings to the rural areas of North Carolina.

12. In 2009, NTIA launched the State Broadband Initiative (SBI) grant program to facilitate the integration of broadband and information technology into state and local economies.

a. Do States envision SBI state designated entities participating or assisting this new State and Local Implementation grant program?

Yes. Currently in the North Carolina Department of Commerce.

b. How can the SBI state designated entities work with States in planning for the nationwide public safety broadband network?

Engage the resources if available (both people and data). Currently both available in North Carolina.

13. What outcomes should be achieved by the State and Local Implementation grant program?

a. Are there data that the States and local jurisdictions should deliver to document the outcomes of the grant program?

Yes. It should meet guidelines set at the national level.

b. If so, how should they be measured?

Must be sufficient to meet requirements to move forward with FirstNet approach.

c. Who should collect this information and in what format?

The states should collect the information in a federally prescribed format.

d. What data already exist and what new data could be gathered as part of the program?

See answers to #5 & #12

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://www.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 existing 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?

Existing standard tools should be used by all, unless there are others identified very quickly that are capturing data that the published tools do not.

15. Do the States have a preferred methodology for NTIA to use to distribute the grant funds available under the State and Local Implementation grant program?

North Carolina does not have a preferred method of funding. However, factors relating to prioritizing expenditures such as the incidents or risk levels of natural disasters may be considered. It is likely that such information will be gathered during the grant process. Might want to consider basing it on biggest bang for the buck approach.

a. Should NTIA consider allocating the grant funds based on population?

See above.

b. What other targeted allocation methods might be appropriate to use?

See above.

c. Should NTIA consider phasing the distribution of grant funds in the new program?

See above.

State Funding and Performance Requirements

16. What role, if any, should the States' Chief Information Officer (CIO) or Chief Technology Officer (CTO) play in the State and Local Implementation grant program and the required consultations with FirstNet? How will these different positions interact and work with public safety officials under the State and Local Implementation grant program?

The CIO and/or CTO must be fully engaged to make certain technology requirements are followed consistently.

17. The Act requires that the Federal share of the cost of activities carried out under the State and Local Implementation grant program not exceed 80 percent and it gives the Assistant Secretary the authority to waive the matching requirement, in whole or in part, if good cause is shown and upon determining that the waiver is in the public interest. As NTIA develops the State and Local Implementation grant program, what are some of the factors it should consider regarding States' ability to secure matching funds?

Criteria for such waivers must be clearly defined by the national governing board. Also how such requests are measured should also be defined.

18. What public interest factors should NTIA consider when weighing whether to grant a waiver of the matching requirement of State and Local Implementation grant program?
Public interest factors should include areas susceptible to natural disasters coupled with extremely large seasonal population growth.

Other

19. Please provide comment on any other issues that NTIA should consider in creating the State and Local Implementation grant program, consistent with the Act's requirements.

Footnote:

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