

NTIA Request for Information on the Development of the State and Local Implementation Grant Program
for the Nationwide Public Safety Broadband Network

Comments of APCO

June 14, 2012

Docket No. 120509050-1050-01

The Association of Public-Safety Communications Officials-International, Inc. ("APCO") hereby submits the following comments in response to NTIA's above-captioned Request for Information ("RFI").

Founded in 1935, APCO is the nation's oldest and largest public safety communications organization. Most APCO members are state or local government employees who manage and operate communications systems for police, fire, emergency medical, forestry conservation, highway maintenance, disaster relief, and other public safety agencies.

APCO appreciates the opportunity afforded by NTIA for public comment to inform its development of the programmatic requirements to govern the state and local planning grants program established under the Middle Class Tax Relief and Job Creation Act of 2012. Provided below are select questions from the RFI and APCO's comments.

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?

Response:

- Most first responders and government users of the National Public Safety Broadband Network (NPSBN) are local – city, county, and other local jurisdictions. Moreover, a majority of the potential government-owned infrastructure that may be leveraged for use in the NPSBN are deployed by cities, counties and other local jurisdictions.
- Therefore, in using these grant funds, states must place the highest priority on establishing or enhancing governance structures that ensure adequate representation of local jurisdictions in their respective states. Such governance structures should be established for use in all phases of FirstNet's responsibilities to ensure the design, construction and operation of the NPSBN as described above. Ideally, the governance structures should include local representatives of first responders but also elected officials, Chief Information Officers, public safety communications professionals, Public Safety Answering Points, emergency operations centers, public works/transportation/utilities and other local government and tribal responders and infrastructure owners.
- To streamline information gathering and decision-making, the governance structures can include a smaller "decision-making" committee or board, and larger advisory panels or boards.
- State governance structures should seek to find synergies and opportunities with adjoining states and regions to achieve common goals or efficiencies. Governance structures that represent multiple states may prove valuable.

- As one specific deliverable from the grants, states should clearly document their governance structure, its charter and enabling documents, and describe how the state will use that structure to work with FirstNet.
- As a source of technical assistance in establishing governance structures, states should take advantage of existing models, such as the services offered by the Office of Emergency Communications (OEC) of the Department of Homeland Security (DHS) or independent consulting firms.

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

Response:

- This is a decision best left to states – it will vary for each state.
- However the state should be required to demonstrate how the chosen body/official relates to the governance structure described in the response to question 1. Ideally, the point of contact will be the same or closely related.

2b. Who might serve on the governmental body (e.g., public partners, private partners, technical experts, Chief Information Officers, SWIC, finance officials, or legal experts)?

Response:

- The governance structures should include representatives who can perform, or cause to be performed, a variety of specific tasks to support the NPSBN in the State, for example:
 - Collect information about publicly and privately owned infrastructure (sites, backhaul) in the State which could be used in FirstNet's implementation.
 - Consult with FirstNet in its preparation of RFPs.
 - Consult with FirstNet in its evaluation of RFP responses and vendor selection.
 - Understand local agency needs for priority, network management, in-building coverage, special needs areas (high crime areas or terrorist-vulnerable targets) and similar needs.
 - Have extensive knowledge about or relationships with potential FirstNet users in the State, including on a secondary basis in public/private arrangements, such as private utilities, transportation and public works, building and land use.
 - Have extensive knowledge of potential local applications and uses for the network, e.g. computer-aided dispatch, records management and information sharing, etc.
 - Understand other special issues relating to the State and local jurisdictions, e.g. zoning, local laws.
 - Represent entities which have received BTOP or similar grants to construct infrastructure and therefore have assets which the federal government has already funded and therefore can be used in FirstNet construction (example from Washington State: NOANET, which received over \$50 million dollars for fiber infrastructure to connect anchor institutions).
- See also response to question 1.

2c. How should the States plan to involve the local entities in the State and Local Implementation grant program?

Response:

- See response to questions 1 and 2b.

2d. How should the States plan to involve the tribal entities in the grant program?

Response:

- See response to question 1.

2e. 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:

- See response to questions 1 and 2b.

2f. 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:

- See response to questions 1 and 2b.

2g. 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?

Response:

- In determining their governance structures, States should be encouraged to recognize (a) any existing UASI region inside their state or adjacent to it and (b) any existing regional organization which provides public safety communications services, e.g. a communications district providing a 700 MHz or 800 MHz regional trunked public safety network.
- In addition, each State should be encouraged to facilitate possible public/private partnerships with organizations that provide services on a regional and/or multi-state basis.
- Further, States should be encouraged to consult with surrounding States and share information regarding their governance and deployment plans.

2h. How should States plan to involve the Federal users and entities located within their States in the grant program?

Response:

- Typically, State and local government agencies already have established relationships with Federal users, e.g. state emergency managers with the local FEMA region, local law enforcement and fusion centers, or joint anti-terrorism task forces. States should leverage these existing relationships to draw Federal users and entities into their governance structures, and use the grant funds to demonstrate how those relationships will be leveraged. Additionally, Federal agencies that interact with State and local first responders should be encouraged to communicate their interests in utilizing the NPSBN to the State's governance organization.
- State and local law enforcement usually works quite closely with a number of federal first responder and law enforcement agencies, especially at airports, seaports and potential terrorist targets. It is important that such federal agencies be on the network for both daily use and during emergencies and disasters. This use might imply somewhat different or more stringent requirements for network security and authentication relative to state and local public safety networks. But total interoperability from local to State to Federal levels is of overriding importance.

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. 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?

Response:

- As the legislation calls for, FirstNet must leverage publicly and privately owned infrastructure (fiber and microwave backhaul, radio sites, towers, buildings, etc.) to implement the NPSBN. But

by comparison to the thousands of local government infrastructure owners, it will be much easier for FirstNet to negotiate partnerships with a few large private entities (e.g. wireless service providers or major tower owners).

- Therefore, States should use the grant funds to establish structures and mechanisms to collect as much infrastructure-specific data as possible. For example, States could use existing tools such as CASM to collect data on all available state and local radio sites. Or states could establish subcommittees of the statewide governing entity specifically to work with the major local governments and agencies who own infrastructure, in order to simplify FirstNet's ability to leverage this data in its negotiations to seek public/private partnerships to implement the NPSBN.
- Guidelines or benchmarking of the value of local assets should be provided by the States (or FirstNet) in order to provide a base value for determination of the "investment" which will be made by each local or regional first responder community.

3a. 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?

Response:

- In order to streamline the process of gathering this important information, consistent standards or processes will be essential to collect the bulk of the data. Models should be researched from tools already developed or used by federal and state agencies, and organizations such as APCO International, to gather and hold this information. Additional tools should be purchased or developed only when no existing tool can be used.

3c. 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?

Response:

- Time is of the essence. The timeframe for reporting of the information should be approximately six months after NTIA issues grant criteria. States can supplement responses as necessary thereafter. But FirstNet needs to process the information as soon as possible so that it may timely develop network policies and requests for proposals.

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

Response:

- If helpful to streamline the planning grant process, States should leverage any existing governance structures, supplemented or modified as appropriate, to account for the significantly different LTE technology and the national governance structure created by the legislation (FirstNet).
- States must also recognize that cities and counties, in most cases, own the bulk of such infrastructure and also will have the bulk of the responders using in the network. These facts underscore the need for collaboration and inclusive governance structures.

4f. Should the costs to change or evolve existing governance and Statewide Plans be eligible in the new program?

Response:

- Yes, unless the NTIA grant program duplicates grants available from DHS or other sources.

4g. Should the maintenance of those existing governance bodies and plans be eligible in State and Local Implementation grant program?

Response:

- Typically, states have difficulty identifying and funding staff (e.g. SWICs) to manage the communications interoperability programs. If sufficient funding is available, the funding of such positions should be an allowable cost under the grant program. If funding of such positions is included, the job duties must specifically relate to working with FirstNet to develop plans, designs and implementation of the NPSBN.

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:

- See response to question 3.
- The use of local and State infrastructure – a sort of “public-public” partnership with FirstNet, brings value far beyond the value of the infrastructure itself. If State, city and county agencies know their infrastructure is used, and they are involved in governance and management, they also become invested in the network and in the success of that network. This, in turn, engenders their active use of the network for all agencies – including first responders and secondary users that are part of public/private partnerships. Such extensive use of the network is vital to FirstNet’s long-term viability and success.

5a. 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:

- In the limited time that states will have to collect information on available infrastructure, FirstNet should create guidelines for the standardized collection of basic data on state and local infrastructure as an initial indication of suitability for incorporation into the NPSBN. For example, asking whether commercial power is available at the site, whether battery or generator power is available, tower loading and capacity to expand, etc.
- As a general matter, there should be nationwide guidelines or best practices for infrastructure, e.g. hardening of radio sites, power and back-up power, space available for additional antennas on the towers and equipment in buildings, tower wind loading and maintenance standards.
- FirstNet could create such standards by leveraging the work and experience of existing organizations, such as APCO. For example, APCO:
 - is an ANSI standards-setting organization, and thus can create ANSI standards to help identify the suitability of existing infrastructure and equipment;
 - is a source of technical assistance to public safety agencies in implementing the CASM tool;
 - has helped 700 & 800 MHz Regional Planning Committees in standardizing frequency usage, loading, and coordination practices on a regional basis;
 - created the first fully automated frequency coordination database and application processing system, which can be customized and developed for use in developing a similar database for the collection of state and local infrastructure information; and
 - developed a web-based engineering tool and prediction software that can be applied to the state and local planning process by incorporating the latest technical guidelines and propagation modeling.

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?

Response:

- See responses to questions 3 and 5.

6b. 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:

- Clearinghouses certainly can facilitate public/private partnership opportunities, particularly for smaller entities. Further, using a single model for such a clearinghouse that can be repeated across all states would be most efficient.
- The clearinghouse should be a database of available infrastructure, searchable and available to authorized local and State agencies as well as FirstNet.

6c. Should setting up a clearinghouse be an eligible cost of the grant program?

Response:

- Yes.

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?

Response:

- Experience with PSIC grants is instructive. Those grants were made and money started to flow before all requirements were understood. Then additional requirements and mandates were imposed after projects started, e.g. environmental compliance and assessments.
- APCO appreciates the fact that NTIA has, through this RFI, sought input on this grant program before establishing those requirements, as it can apply lessons learned from the PSIC experience and other federal grant programs so as to result in an improved grant process for this program.

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)?

Response:

- As mentioned above, it is important to include costs of creating and staffing statewide governance structures.

9a. Should data gathering on current broadband and mobile data infrastructure be considered an allowable cost?

Response:

- Yes and States should acquire or use tools (such as CASM), which become part of the everyday work of a state or local agency, rather than used for a one-time data collection.
- Further, existing tools for broadband infrastructure used by commercial operators that may engage in public/private partnerships to implement the NPSBN should be considered as well.

9b. 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?

Response:

- Yes, if additional personnel is necessary after considering existing workforce, such as to gain expertise specific to LTE technology.

10. What factors should NTIA consider in prioritizing grants for activities that ensure coverage in rural as well as urban areas?

Response:

- The legislation requires consideration of coverage in rural areas. Further, planning grants for rural areas can help identify potential local partners that may have infrastructure and other resources that can be leveraged.

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

Response:

- The establishment of the critical statewide governance structures identified in response to question 1, and the collection of as much data as possible on each state's particular requirements and infrastructure for inclusion into FirstNet's RFP process.

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?

Response:

- See response to question 3.

15a. Should NTIA consider allocating the grant funds based on population?

Response:

- NTIA could leverage work done by FEMA, DHS and others to do "all hazards" assessments and allocate the grant funds accordingly.
- However, ideally, FirstNet and States would create business plans with demand and marketing components. This is similar to the planning processes used by telecommunications companies when making wireless deployment decisions. For example, a marketing and demand plan might show portions of a state which have very little commercial wireless infrastructure due to, say, difficult geography, but a significant amount of consumer, business and government demand. Such areas would be ideal target locations for planning funds. As another example, marketing plans should reveal the potential fees which local governments and responder agencies might be able to bear in certain locations. Such marketing plans would help guide the State and FirstNet in making network design and deployment decisions which are affordable for agencies in that area. As a third example, such demand plans might show that responder agencies in a certain jurisdiction are unable to afford to put computers in police and other responder vehicles. Such a demand assessment would drive certain FirstNet deployment decisions there.

15c. Should NTIA consider phasing the distribution of grant funds in the new program?

Response:

- NTIA should consider phasing of grant funds to ensure that funding remains after the states provide their information to FirstNet. This way, States will have continued assistance to support their governance bodies and serve as a resource to FirstNet.

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?

Response:

- Traditionally, state and local agencies across the country deploy separate communications networks for public safety and other departments. These investments often are duplicative and costly, and no longer affordable.
- CIOs, like Chief Financial Officers (CFOs), are charged with a global view of how information technologies and networks are used across a single government (e.g. a city) or across governments (e.g. all the cities, PSAPs etc. in a county or state).
- Individual public safety agencies lack the resources and ability to build their own networks or operate their own data centers and other IT resources.
- Accordingly, NTIA grants should require involvement of the CIO, CFO, or both, in each state.