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May 31, 2012  
SGLIP  
The National Telecommunications and Information Administration

Subj: In response to The National Telecommunications and Information Administration (NTIA) is issuing a Request for Information (RFI) seeking public comment on various issues relating to the development of the State and Local Implementation grant program, which NTIA must establish pursuant to the Middle Class Tax Relief and Job Creation Act of 2012 to assist state and local governments in planning for a single, nationwide interoperable public safety broadband network.

Administration Review Board,

Attached you will find my response to the questions relating to the rollout of the Nations Broadband Network for First Responders.

It has been an honor.

Sincerely yours,

Dr. Michael Myers

## **In response to Request by the DEPARTMENT OF COMMERCE**

### **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**

**AGENCY:** National Telecommunications and Information Administration, U.S. Department of Commerce.

**ACTION:** Request for Information.

**SUMMARY:** The following is a response to The National Telecommunications and Information Administration (NTIA) is issuing a Request for Information (RFI) seeking public comment on various issues relating to the development of the State and Local Implementation grant program, which NTIA must establish pursuant to the Middle Class Tax Relief and Job Creation Act of 2012 to assist state and local governments in planning for a single, nationwide interoperable public safety broadband network. As stated the NTIA intends to use the input from this process to inform the development of programmatic requirements to govern the state and local planning grants program. It is noted that “Comments” must be received by June 15, 2012 at 5:00 p.m. Eastern Daylight Time and may be submitted by email to [SLIGP@ntia.doc.gov](mailto:SLIGP@ntia.doc.gov).

This response is not Confidential Business Information and not considered sensitive or protected information.

Respondee: Dr. Michael Myers; Dr Myers is a 27 year year veteran and expert in both telecommunications designs, builds, operations and maintenance activities to include program and project management. Dr. Myers is also an expert in the Advancement of Telecommunication programs via Public Private Partnerships within multiple vertical industries, to include Public Safety. He holds a PhD in Business Organizational Management specialized in Information Technology and has written many article and publications on the topic of Public Private Partnerships advancing telecommunications. Dr. Myers also hold a Masters Degree in Telecommunications Management and an Undergraduate Degree in Computer Science from the University of Maryland.

### **Response to Request for Comment**

#### *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?*

*Response:* Based on a single national design the entire concept of building the PSBN should be administered under a model of corporate structure; as with any national commercial carrier the FirstNet Board would act as the Headquarters element and the State would act as regions. It is crucial that not only the technical adherence be maintained, but it will be imperative that the strategy follow a strict path of “self funding” functionality. With the corporate structure footprint it develops a simplistic vision that allows for the creation of the governance and that self-funding model very similar to a nationwide commercial corporation with a strategic focus.

Statistics show that localized market penetration, deployment activities and coverage will make up of more than 70% of the execution, governance and corporate modeling effect. In the end the deployment, maintenance and operation of this network will holistically have to be executed at the local and/or regional stage. On a technical footprint this does not discount the oversight and control of the FirstNet with a centralized national control center to monitor and administer the entire platform; in fact this enhances its functionality and capabilities through a centralized governance, standards and cost/revenue control mechanism by eliminating multiple Headquarter type elements and focusing the direction to one entity. As with any large corporation FirstNet, in acting as a corporate headquarters, would formulate the design standards to build by; procurement procedures to contract under; and deployment methodologies for execution. At the same time FirstNet will maintain and adhere the allocation of budgets (grants) in jump-starting the deployment process.

One of the main areas of concern, outside of the technical and tactical design and deployment characteristics, will be the “self-funding” mechanism to power the PSBN. As with any corporation their primary intent is to generate revenue, but they traditionally lack the funding, and spirit, to deploy a solution just for a societal cause, i.e. Public Safety concerns. What is advantageous from the PSBN standpoint is that it has the governmental backing to build the solution based on societal just cause but also has the capability to act as any private commercial venture with the State agencies, or entities, acting as the customers. This is the point to which is a primary reason for State to Federal consultative services to its FirstNet leadership and execution. Without the States input the Federal impact will be limited, if not impossible, in that the potential contracts from State entities are under the control of the State itself and in fact are one in the same. This relationship is a fact and must be adhered to if the Government wishes to have a successfully deployed, managed and funded program for Public Safety; especially under the auspices of a “single national network”. Without the ability to “self fund” it will make no difference on what is designed and deployed; eventually it would wither away into a state of disrepair and waste.

As with any revenue generating plan you need clients. In this case those clients are State sponsored entities that require, or will require, wireless broadband access for their own business objectives. Due to the market penetration and the adaption of LTE broadband, and regardless of the outcome of the PSBN being deployed, those same State entities will still require this wireless access in the future. Traditionally the individual State entities would either have to invest in

designing, building and deploying their own solution; which ultimately would increase tax dollars spent on statewide capital programs, both Federally and State. That would mean separate statewide communication programs for Police, Fire, EMS, Utilities, Agriculture and a host of other State agencies, all requiring State or Federal financial support. Or, the State entity would require the commercialization of its business objectives by leasing such wireless services from the commercial carriers further impacting the business case alignment between a State run agency and a commercial carriers prime directive of revenue generation; all of which impacts standards and hardening type requirements. The opportunity we face today is to allow that PSBN network to be the States Private (and protected) National Carrier.

With the PSBN being administered as a “single national private carrier” would allow the State to be consultative about the use and impacts of State entities by setting up long-term (20-30 year) annual multi-million dollar service level agreements with the PSBN instead of asking, and spending, State and Federal tax dollars to build their own, or lease it from commercial carriers.

It is further stipulated that the subscriber model must be avoided at all costs. The subscriber model is the traditional business model of a commercial carrier. Such a objective would require cost control mechanisms of billing and operational support controls that are not necessary towards a private network. The revenue to self-fund this program would be based on long-term contracts as stipulated above. In essence the PSBN would act as a long term contract organization between the State regional offices and the State internal agencies (entities). Another important aspect of this setup is that it generates much more recurring revenue for the longer term that provides a reliable self-funding framework. Case in point would be the Department of Water Resources in California which has long standing contracts with 29 water districts and municipalities that have generated a cash positive inlay since its creation. Those contracts are in 50 year terms.

### ***What data should States compile for the consultation process with FirstNet?***

*Response:* Immediate compilation of the technical and tactical aspects of the local contracts that are utilized for the design, deployment and operations of current network plans. This will be imperative that a State compile a listing of internal State resources and entities that require access to the PSBN. This listing of internal organizations could be vetted through the FirstNet Board for adherence to Public Safety requirements and be further scrutinized for existing infrastructure that could be used as part of the PSBN build within that State.

On the “self-funding” aspect; the State could start to compile an internal State agency listing that shows what communication plans are currently under contract, under design or in the State Telecommunication Plans. As compiled against this list would be each individual State entities capital and operational costs associated with its current communication needs. This will provide an adequate annual figure for a long-term service contract as it pertains to the incorporation of the PSBN services. As an example: if a State entity currently has planned, or has already invested, millions of dollars into large-scale communication networks that could ultimately be provided through the PSBN network. This would act as a trigger for estimating a fraction of those expenditures that would be suitable for long-term standing annual service level contracts

with FirstNet. This would mean that the FirstNet, or PSBN, would cover the technological curve as well as the risk of maintaining the complex communication solution for the State.

Another opportunity that is presented with the scenario is the impact of Public-Private Partnering. In essence the picture acquired from the long-term service level contracts are advantageous to private investment where as those contracts are viewed as long-term recurring revenue which acts as a great incentive. Such incentive and private investments could actually help recoup lost tax dollars spent on technologies already deployed; i.e. SMART Grid, LMR, P25, etc..

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

*Response:* As viewed the Grant Program should commence based on a fixed figure of capital requirements for each and every situation. In essence, the Grant will “kick-off” State deployments but is not viewed as being as sufficient to meet long-term goals.

***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?***

*Response:* As with most States exist a State CIO that reports to the State Governor. This appointee should be the point of contact, or their selected representative. It will be imperative that this point of contact report straight to the legislative body of the State or the State Governor's office.

***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)?***

*Response:* There are two immediate areas of a Governing Board: the creation and rollout of the PSBN with FirstNet which is already creating a Federal level governing board. The second would be the regional, or State Governing Board. In addressing the State level governing requirements it may be necessary to include the essential topic of “self-funding” mechanism -- that being a Public-Private-Partnership.

As to bridge the Public-Private-Partnership agreements it should be reflected in a shareholder concept. In essence, it would require that the State entities would retain 51% ownership of the all Public-Private-Partnerships administered at a centralized State level. An elected board would be commissioned under the control of FirstNet and the State Governor/CIO. The remaining 49% would be open to private investment and thus board representation. Those investors would be limited to the review and approval of the dominant 51%. Other State entities, i.e. Utilities, Regents, Police, Fire, Agriculture and others, could also have representation on the State Governing Board based on infrastructure and annual service level payments to the PSBN; such as off-setting associated build costs with utilizing existing infrastructure. It will be important to retain a Federal and/or State capability to take over the partnership in dire circumstances. Thus, it

can be illustrated that the Governing Board would be administered through such an ownership model.

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

*Response:* The State entities are one in the same with the State itself. They do administer separate budgets and cost structures, but they are typically under the control of the State Legislation or Governor through the State CIO. As was addressed above the State entities should be centralized under a State Governing Board run by the State CIO that reports to the Governor in coordination with the FirstNet Board. It will also allow the State entities to umbrella State Telecommunications Plan which would now include wireless broadband connectivity through the PSBN. It will be essential for the FirstNet Board to establish the governing rules, technical design and procurement procedures that can be administered by the State Governing Board. In some instances that may be “rubber stamping” existing State procedures and current broadband implementation plans (including waiver recipients).

As for the investment scenarios and ownership of a Public Private Partnership the State will act locally for the FirstNet Board but would require Federal cooperation for any additions changes or approvals within the State Entities that would require broadband service.

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

*Response:* As addressed above, the Tribal Concerns should hold equal representation as addressed to all State entities.

***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:* As with any Public Private Partnership and the dispersant of any funds for the design, deployment, operations and maintenance activities for the statewide broadband the equality of the representation would be administered by the State as well as FirstNet approval. What will be essential is the design-build aspect of the rollout must adhere to the most stringent hardening requirements of all the participants who will utilize the network. As an example: if the Police only require 8 hour backup power generation but the Utilities require 24 hour backup, then the network will be designed to meet the greater of the two; that being 24 hours. If there is any other entity within the State, i.e. Department of Forestry or Agriculture and they require more then the solution would be designed to meet those requirements instead. This will insure all the entities that ride the network will have their needs met.

***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:* The most reasonable way to conduct such cooperation would be through weekly, monthly or quarterly conferences where all the representatives are present.

**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?**

*Response:* State and local grant programs can be coordinated at the FirstNet Board level as to provide oversight and equality at the same time align interstate cooperation between internal multiple State resources. This will provide insight and control of unnecessary or duplicate processes and controls that can be best managed through the program and project management teams. An alternative may be to utilize interstate solutions; as an example would be the Utilities who already perform and provide coordinated services for just this type of exercise. Most power distribution firms have requirements that fall within multi-state jurisdictions and have successfully coordinated such activities in the past. There most likely exist other relationships that can foster support.

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

*Response:* Federal representation will have to be coordinated through the parent organization of the FirstNet Board. This should be nothing new in that relationships already exist at this level to which there would be no dramatic change. One thing to note is that by forming a Public Private Partnership (which needs to be executed at the FirstNet and State level) will allow the Federal agencies to have much larger and long-term SLA (Service Level Agreement) contracts on a national basis. In essence where as a State entity like a State Utility, Police or Transportation agency would enter a long-term SLA agreement with the State centralized broadband partnership; at the Federal level such organizations as the FBI or DHS could enter multi-state agreements with contracts at the FirstNet level, where as they would sign access contracts with the a national footprint rather than just a single state alone. The essential piece to this being a success will be a Public Private Partnership at the FirstNet level that has multiple facing sub-partnerships at the State level. In essence the FirstNet Board will act as the Corporate Headquarters and the State will act as the regional or State entities to FirstNet forming a private framework of a corporate structure for execution and governance.

**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.**

*Response:* On a funding aspect; through a Public Private Partnership, as addressed in section 2B, with FirstNet acting in a corporate headquarters model, this will allow for local privatization and investment from State entities. It would be advised to administer the RFP process to which the State, and the State entities, would typically already have existing capital programs processes to build such solutions even if the FirstNet did not exist. Alternatively the “private” part of a Public Private Partnership will allow for financial private interest to also invest in the network deployment and long-term operations, which could include private, or commercial, interest and desires to win such RFPs. FirstNet will provide the necessary “templates” for governance, procurement procedures, design standardization and project execution frameworks to which the

States can execute from. It should be noted that the simplistic model of execution should be utilized in that there may be “ways of doing business” at the State level that have to be breached and accepted at the State level. It will be up to the State to insure they can obtain the internal state infrastructure inventories. It can be further noted that most of this information already exists at the State level or is easily retrieved.

Alternatively, it needs to be investigated for the FirstNet Board itself to have an overall RFP to be solicited to the market where as one centralized program manager and design controller could be selected to help manage the entire RFP procedures for the States. It should be noted that the execution of the physical and tactical aspects of the rollout, maintenance and operations will predominately happen locally and thus would require the execution of State initiated RFPs. It will be crucial that these solutions need to be commissioned at the State/regional level instead of one over arching RFP.

**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?**

*Response:* As addressed above the FirstNet Board would be best served to act as the corporate headquarters to the State/regional implementations, thus the grant program would be administered as a budget allocation process, which is nothing new. Through the local execution the States would generate budget estimates that will be partnered with scheduling and material cost estimates. These same budgets would, could, be used for the baseline of the RFP for the State itself. Once blessed by the FirstNet Board then the RFP process would be solicited to the market. Thus, initially, the grants could be utilized to help pay for the proposal phase.

**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?**

*Response:* Yes, it will be essential to the success that the FirstNet Board provide the framework to which the States can execute on. As was addressed the FirstNet Board would act as the corporate headquarters element thus would dictate the governance, procedures and templates for execution. As for what the policies and standards should be it would be best suited to utilize traditional methods of design, build operate and maintain models. If an overall RFP for programmatic support of the FirstNet Board then that awarded organization would follow the standard processes and controls of adherence for a national deployment. This does not mean that one technical vendor for LTE will be necessary. It would be unwise to “put all the eggs in one basket”, especially with this size of a network deployment. As long as the vendors LTE solutions interoperate, which they should, then a separate LTE solution can be administered differently for each State. But, the execution model of the RFP; the standards to be met; the procurement process and the operational model should be identical; this will allow for ease of implementation when it comes to interstate, regional and commercial roaming.

**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?**

*Response:* A 12-month schedule should be suitable being that the grant process would be tied to the proposal phase initially. I would further recommend an award program, or an incentive, to have it done faster. After this initial 12-month time period the RFP process, and awarded build aspects, would be timed accordingly to the State deployment schedule and thus is not part of the initial 12-month period.

## **Existing Public Safety Governance and Planning Authorities**

**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?**

*Response:* I do not represent a State entity. The state entities that I have been communicating with have all demonstrate some form of a governance model in planning wireless based public safety solutions. It should be noted that in my observations there has been a distinct difference in the manner to which the State handles the Public Safety programs. Typically the entrenched LMR type platforms reside within entities that are made up of long-term radio shops manned by traditional radio experts relating to LMR or RF based standard solutions. As it pertains to the LTE technology these shops tend to lack the expertise or the functionality to progress the complex technology above and beyond the LMR background. Most notably it has been my observation that the LTE technology and its implementation tends to resonate with the IT shops associated with the State agencies...not the Radio shops. Such a gap in the acceptance of the technology will have an impact on its adoption.

**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?**

*Response:* I do not represent a State entity. The States I have helped with the planning of LTE have all demonstrated some manner of strategy around the implementation of baseline telecommunication infrastructures; predominately fiber and RF based LMR type solutions. With the onset of the new LTE broadband technologies there have been a few States that are seriously strategizing around the adoption of the new technology to their existing statewide plans together with consolidation and centralization aspects. One thing to note though is that many of the States are interested in the technologies ability to also generate revenue to which they are seriously investigating ways of implementing it on a self-funding business model.

**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?**

Response: I do not represent a State entity. In my observation it will be unavoidable to include certain aspects of a States already entrenched processes and procedures. What could be of use is the clarity and ease around centralization of a State assets; its deployment requirements for broadband; a plan or strategy in its adaption to the already existing infrastructure; plus its ability to integrate nationally with a cost model that is self-funding. In essence, the State could use a centralized design and integration model that also incorporates governance structures for internal State agencies to pay for service when the access the network.

**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?**

*Response:* It would be wise for the FirstNet Board to initiate the framework and guidelines for a National Public Safety Broadband Plan that will envelop a Statewide Communications Interoperability Plan. As part of those plans it will describe the overall strategy and integration model that the States can centralize their existing infrastructure under; this would include new State entities that can contribute telecommunication infrastructure that has not been included in the past, i.e. Utilities, Forestry, DOT and others. It will be imperative that the FirstNet Board take the leadership role in developing and portraying the vision of the long term consolidated infrastructure throughout the entire United States. Any other execution model will be detrimental to the success of the overall Public Safety Broadband plan.

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

*Response:* I do not represent a State entity. As with any long-term plan this process is evolving and thus should treated as such. Technologies change and adapt for consolidation and cost savings all the time. New features are added and upgrades happen across the board, especially in regards to the LTE broadband technologies. It will be important not to lose focus on the fact that we are designing, building, operating and maintaining a nationwide broadband service; not a document. The Statewide plans need to adapt to the needs of the Public Safety requirements -- not the other way around.

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

*Response:* I do not represent a State entity. Yes, most States will need to consolidate and centralize resources and infrastructure to be properly aligned with the new broadband plan. As with any business model things change. With that said there will always be room for expansion and upgrades. In the end the broadband solution is a technology solution and thus we should assume that we are investing in a technology curve. It should be noted that technology changes. We should treat it as such and remain open to such changes having an impact on cost in the future. It would be unwise to believe that by abandoning existing resources and assets, or by not including them in the plan, would not have a detrimental impact of future budgets and allocations.

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

*Response:* I do not represent a State entity. Yes, it would be a sound decision to include resources already equipped and knowledgeable to the State resources and baseline solutions already deployed and that have the capacity to interface with the broadband network. Cost advantages of consolidation and centralization will be greatly increased with such eligibility.

## **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:* Through a Public Private Partnership maintained at the State level and supported at the FirstNet level will insure the solid future investment into standing long term contracts. As part of those Public Private Partnerships will be the inclusion of State entities that all have telecommunication assets that may help in the deployment and build out of the broadband plan, therefore it is highly recommended that all State entities tied to Public Safety be included in the overall plan. You should note that some of these entities are actually multi-state in nature and thus could further simplify the process of integration and interoperability between States and regions.

#### **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:* Each State has multiple entities that require broadband technologies. As with any Public Private Partnership the ability to save costs by utilizing existing resources and assets to offset costs allows for a more efficient business model. Through a process of inventory controls an audit should be conducted. Once the audit has been completed then an asset inventory, or database, of all existing infrastructure and resources can be administered through the State project office for the inclusion into the design and deployment phase. Such infrastructure inclusion is nothing new. Having experience in the deployment of thousands of tower and fiber infrastructures it is advised to maintain as many options as possible. Keep in mind that, sometimes, remediation of an existing site can cost more than just building “greenfield”.

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

*Response:* There are numerous assets available for any given State, i.e. Agriculture, Forestry, Utilities, Transportation, DoD and others. Through the State agencies that tie into the CIO organization you will find assets of fiber, microwave, cellular and other radio based technologies. You will also find a myriad of control centers, data centers and storage area networks tied together with large complex enterprise solutions. Outside of the physical assets you will find a whole host of technical skill-sets and talents that are very familiar with the execution, deployment and operations of many broadband technologies -- to include LTE.

#### **c. How will States include utilities or other interested third parties in their planning activities?**

*Response:* As with any large programs there will be a multitude of agencies wanting access to the broadband solution. As for the execution of the program/project there will be a centralized project office for the State, most likely under the control of the State CIO, to which all State entities and agencies will flow through for resources, assets and inputs. Most importantly will be the cost cutting measures of utilizing existing assets that can be utilized to minimize cost and time. As was depicted earlier it would be essential that the Public Private Partnership also be a part of this teaming effort; in essence certain assets within a Utility, for example, could be utilized and through the use of assets they could mitigate a lower annual payment for use of the broadband network. It will be crucial that the controlling board of the Public Private Partnership maintain the equality of the State Agencies and their representation in the matter of access and asset distribution and sharing.

**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:* This will be essential to the success of the deployment and long-term operations of the network. Current estimates for the completed national network will fall somewhere between 50-100 Billion dollars. Access to additional funding and investment sources will be pivotal to making this a success.

to initiate such an endeavor there would need to be a P3 (Public Private Partnership) Committee/ Department created to help with the State based formation of P3 modeling to include private investment opportunities and the reuse and distribution of essential assets to cut and streamline costs. This committee's, or department's, primary mission is the case-by-case business case analysis for each and every State deployed network that will tie into the overall national plan. It will be necessary to execute in a similar format as to eliminate complexities and unfair business practices and to insure equality for the investors, public and private, for each and every P3 model initiated.

**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:* I would envision one overall program management RFP, plus an additional centralized datacenter and control center RFP let by FirstNet itself. Its purpose is to maintain a centralized model of execution and governance that the States can utilize to build towards. Sub to overall FirstNet RFPs would also be RFPs at the State level for the same purposes, but to include the actual deployment, operations and maintenance of the localized network assets. This is necessary due to the fact that more than 80% of the execution and deployment will happen at the local State level.

An alternative would be to formulate the RFP process under a Public Private Partnership venture. This limits the amount of players to strategic team that compete for the overall program, i.e. GD vs- Raytheon etc.. This has limited functionality and may not be big enough in itself to handle the size and complexity of each and every State deployment needs. Plus, it will complicate the

Public and Private Partnership at the State level that could threaten a States ability to recoup costs of deployments, plus the self-funding functionality required, through its long-term annual contracts that generate cash for the State.

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

*Response:* States should start the process of forming a centralized project office under the State CIO. This organization could start auditing existing agencies for resources that can used as part of the statewide deployment of broadband access. This would include control centers, data-centers, fiber and microwave assets. Once the FirstNet Board initiates its centralized modeling for project executions, governance and design scenarios the State Project Offices can then commence the RFP process for the Build, Operate and Construct model through Public Private Partnership for its statewide build.

It would also be wise for the State to start to talk about Public Private Partnership arrangements as investment opportunities throughout its state agencies as well as private investment scenarios.

**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:* Yes, this will most likely be the only way to perform given that a great portion of the build will happen locally and regionally. The State CIO should be the one that centralizes these operations. However, the procurement and design process will need to be maintained at the FirstNet level.

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

*Response:* Yes, as a budgetary requirement for building the national platform the centralization of the Statewide broadband program should be eligible for Federal Grants. You should note that in a Public Private Partnership these costs could potential be recouped through investment scenarios.

**State and Local Implementation Grant Activities**

**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:* Not familiar enough with this topic to discuss.

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

*Response:* The entire broadband deployment, centralization of State resources in support of that deployment and the operational and maintenance activities that will follow suite should all be considered as viable activities under the grant program. You should note that with proper execution of the Public Private Partnership these figures could be eliminated with private

investment and already existing State budgets allocated for telecommunication and IT communication programs. This will depend on the State audit and Federal oversight of existing assets and budgets allocated to a States telecommunication and IT budgets. It will also depend on the amount of income coming in from the various State entities that will pay for long-term standing contracts to access the broadband network. One must remember that having the internal State organizations, as well as Federal organizations, move towards a solid annual operations expense for getting access to the broadband network will also decrease their capital expenditures needed to design, build and operate their own solutions, such savings would be put back into the State needs to centralize all its assets around the broadband plan.

**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:* Any costs associated with the design, build, operations and maintenance of the broadband network within the State. This would include State centralization requirements of existing assets that would be utilized in support of these deployments.

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

*Response:* As was addressed above, yes, data gathering and State audits should be considered as part of the allowable costs.

**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?**

*Response:* Yes, as part of the necessity for a State wide deployment of the broadband network will be the requirement for a centralized (preferably Public Private Partnership in its operations and ownership) facility or organization to deploy, maintain and operate the network. Therefore, it will be necessary for grant funding to help pay for positions within that centralized entity initially. It should be noted that with a properly executed Public Private Partnership it is not foreseen to be a long standing necessity that the grant program continue to fund these positions. The Public-Private entity created should suffice once the entity is established and setup. It will be the responsibility of the FirstNet Board to setup and establish the guidelines and management practices in providing oversight to such funding therefor their requirement to manage the resources used to fill those positions. In the end the State centralized public-private entity needs to work under the governance model associated with an overall centralized model of a national deployment and carrier based operation -- that being the FirstNet initiative.

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

*Response:* It would be best suited for the Federal grants to be holistic in nature in its adaption at the State level. The State, using the guidelines setup by the FirstNet Board, should be able to administer those funds according to its project plan, schedule and design characteristics. As part of those requirements, and the availability of assets under all entities with the State, coverage of the rural and urban areas (primarily for broadband access) should be “piped” to the commercial carriers through potential RFPs for managed services. In essence, once the network is built and its footprint is deployed to the rural and urban areas for the requirements of all the State entities (to include Utilities) then FirstNet could setup a competitive bidding process to access the rural and urban broadband residents through the deployed FirstNet network and handled under Managed Service contracts to the carriers. This would generate even more revenue for the national plan plus the achievement for the FCC to provide broadband access to urban and rural citizens who typically do not have access. It should be noted that all Public Safety, or Emergency Response, traffic will take priority over all commercial traffic that may be transported through the FirstNet network.

One more point: a Public, or Private, Utility may be a good candidate as well to provide broadband access to the urban and rural markets and thus should be considered as viable bidders for such managed services contracts in contest with commercial carriers. Just a thought.

**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?**

*Response:* I can not answer fully thus will not.

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?**

*Response:* Can not speak for a State entity. As a citizen though I would envision that all outstanding grant programs, or funding initiatives, to help States design, deploy, operate and/or maintain telecommunication or IT based solutions, that could be used in support of the broadband network should be considered as part of this new overall grant program for FirstNet.

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

*Response:* As was talked about above a centralized Public Private Partnership would generate a private entity to deploy, operate and maintain the broadband network for the State. In return this organization would work directly for the FirstNet “Headquarters” (in context to a private or commercial company). It is within that centralized entity that the State would centralize all its available resources, assets and executable plans surrounding the deployment, thus any existing SBI designated entities would fall under that organization as well. In some cases the State SBI entity itself may end up being the centralized Public Private Partnership entity needed to deliver the broadband network.

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

*Response:* The grant programs main objective should be to facilitate the execution of the deployment of the State wide First Responder Network. These grant programs need to plant the seed and then provide its initial nutrients to grow. Furthermore, these grant programs may be considered for long term care of the network depending on the outcome and the capabilities of the State deployed program, i.e. some States may need more help.

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

*Response:* As with any large deployment based program it is essential the cost controls and procurement functions be tracked down to the smallest element. Furthermore, it will be imperative that the State work with the FirstNet Board in insuring the procurement process is fairly and adequately addressed. This process may be an alignment of a procurement process setup by FirstNet and then adapted at the State level.

#### **b. If so, how should they be measured?**

*Response:* Any grant funds or investments would be maintained through strict accounting practices to include procurement activities and cost expenditures during the entire program. It will be necessary for the FirstNet Board to setup the accounting practices as well as the project billing and procurement activities. The State will utilize the template generated by FirstNet and then establish local cost accounting procedures; as typically done in any large contract deployment instances. Outside of the project accounting procedures, and the procurement purchase program that would be tracked by the project execution organization within the centralized Public Private entity of the State, there will also exist financial and accounting practices for the State entities that buy annual SLA contracts for broadband access as well as track any private investment. Such practices will also account for asset utilization and trade-off scenarios in exchange for broadband access by State entities; all of which allow for “self-funding” capabilities.

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

*Response:* In coordination with the FirstNet Board, who will also established a higher tier of cost reporting and accounting procedures, the State centralized Public Private Partnership entity will account for project and deployment expenditures as well as localized private investment and annual contract controls for broadband access.

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

**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:* It will be wise to solicit all available tools at both the Federal and State level to insure intrinsic design and process control. There will exist, at the local level, a number of tools that are utilized for State inventories and planning procedures. These same type of tools may exist at the Federal and national level. After making an audit of the available, and utilized tools sets, it would be encouraged to utilize, as a standardized approach, to isolate those tools that may be best suited for all. Keep in mind that certain tools may be developed specifically for a certain function within the State that is best to continue its use; unless technically and financially improbable.

**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?**

*Response:* I do not represent a State entity.

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

*Response:* Regardless of the population the same technical design and footprint coverage will be required, thus it would best served to issue the grants on a per project basis.

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

*Response:* Would be best suited to issue the grants based on the project deployments themselves. At the conclusion of the build then possibly, if the Public Private Partnership can not cover it, issue further grants for the operational and maintenance of the network.

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

*Response:* This may be wise as to re-issue grants based on project frameworks and timelines associated with individual state centralization, consolidation and deployment plans.

## **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?**

*Response:* As with any large deployment there is the requirement for centralized organizational controls. For these State deployments it will be essential that the State CIO act as a type of regional President in the deployments. Depending on the outcome of the Public Private Partnership it may be necessary that, at a given point in time, the State CIO would relinquish the control to the Public Private Partnership head as a P3 entity that will run the statewide solution for the foreseeable future. Using a commercial type model of a corporate environment the State officials, and the internal State agency heads, to include entities like the Utilities, would interface through a Board approval process as the direction of the centralized P3 controlling element and

its executive management team. In essence the State, its entities and the private investors will represent the controlling board for the centralized State broadband network.

**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?**

*Response:* At the conclusion of the state audit of inventories for all parties that wish to access the broadband network the FirstNet Board, and its granting authority, will have sufficient data and material to make sound judgement on the dispersement of funds based on expected funding sources, to include asset sharing programs. One must remember that with a solid Public Private Partnership the members, or clients, of the broadband network will have residual cost cutting changes to their existing capital programs and will further streamline their operations with a sound fixed operational expense format of a fixed fee for broadband service. These changes should also be considered when granting money to the new Public Private Partnership model at the State level. In some cases it may not be necessary to have any grant funding at all, or at least at a very reduced requirement.

**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?**

*Response:* Public Private Partnerships are revenue generating models that co-exist between Public and Private business models. Although the grants will be considered a starting point for the deployments to get rolling they could also be viewed as an investment in the State Public Private Partnership itself. In essence, through the self-funding requirement laid out in the Bill, the Public Private Partnership (P3) may be able to recover all the expended grant funding over a small period of time. As part of the P3 is the private investment income that is primarily betting on the recurring revenue model of the long-term SLA contracts from the State agencies and entities who need access to the broadband network. Even though those long-term contracts and the private investments provide a great return on the operational and maintenance costs associated; they also provide a mechanism to pay back invested grant funding into the program itself. In short, the P3 will be able to generate enough private investment, recurring annual payments and fixed asset swapping to formulate a very sound company that will be able to pay the government back for its initial investment.

## **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.