Before the DEPARTMENT OF COMMERCE National Telecommunications and Information Administration Washington, D.C.

 In the Matter of the
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 Development of the Nationwide
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 Interoperable Nationwide Public Safety
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 Broadband Network
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Docket No. 120928505-2505-01

JOINT COMMENTS OF THE STATES OF IDAHO, MONTANA, NEVADA, OREGON, SOUTH DAKOTA, UTAH, AND WYOMING

The States of Idaho, Montana, Nevada, Oregon, South Dakota, Utah, and Wyoming (the "Joint Commenters") hereby submit their comments in response to the Notice of Inquiry issued by the National Telecommunications and Information Administration ("NTIA") on behalf of the First Responder Network Authority ("FirstNet").¹ The NOI seeks public comment on (1) the conceptual network architecture presentation made at the FirstNet Board of Directors ("Board") meeting held on September 25, 2012, (2) the potential framework for developing applications for public safety use discussed at that meeting, and (3) other network design and business plan considerations. FirstNet intends to use this information to shape its efforts to establish the interoperable nationwide Public Safety Broadband Network ("PSBN") called for under the Middle Class Tax Relief and Job Creation Act of 2012 (the "Act").²

The Joint Commenters applaud this effort to seek input from all stakeholders on key issues related to the PSBN. States, in particular, have much to offer, and their participation in and support of FirstNet will be crucial to the success of its mission. They are uniquely situated as both FirstNet's primary partners and the PSBN's primary users. State authorities have intimate knowledge of the particular needs and challenges the PSBN will face within their territories and the optimal strategies for addressing them. They also have public safety experience and infrastructure assets that can be invaluable to the design, construction, and operation of a national interoperable PSBN. Not surprisingly, the Act envisions a significant role for States, from consultation on PSBN issues to contribution of infrastructure assets. As summarized in a recent report by the Potomac Institute,

¹ See "Development of the Nationwide Interoperable Public Safety Broadband Network," 77 Fed. Reg. 60680 (Oct. 4, 2012) ("NOI").

² Middle Class Tax Relief and Job Creation Act of 2012, Public Law 112–96, 126 Stat. 156 (2012).

"[r]egardless of the minimum consultation required by the Act, FirstNet should develop an early and constant dialogue with the governors' offices, the State chief information and chief technical officers as well as the public safety entities in each state. In essence, FirstNet should design a strategic marketing plan geared to its customers, incorporating the States and the state leaders into the process."³

Accordingly, the Joint Commenters do not intend to offer a new or alternative network or application proposal at this time, nor to comment on the efficacy of the proposals already presented to the FirstNet Board. Rather, these comments address the broader threshold issues that should be resolved before proceeding to the issues raised in the NOI. In particular, Joint Commenters urge FirstNet to take the following three steps as quickly as possible.

- First, develop a business plan for the PSBN. This will involve the creation of a cost model, a "strategic marketing plan,"⁴ the preparation of a financial analysis, and consideration of the governance principles for the PSBN. Adopting a business plan will not only demonstrate the manner in which FirstNet intends to comply with the statutory mandate that it be selfsustaining, but also enable State leaders with responsibility for budgetary and network operations matters to understand and plan for the costs and capabilities of the PSBN within the appropriate timeframe. States need to adopt budgets and in some cases may also have to enact legislation to accommodate the business plan chosen by FirstNet, making timely adoption of such a plan even more important.
- Second, establish an Advisory Committee specifically for the States, appointed by the governors or their designees and composed of the senior technical advisors to the governors and the State Chief Information/Technical Officers. Such a dedicated committee would establish a direct conduit for dialogue between the States and FirstNet, providing an avenue through which States can support FirstNet's efforts while also ensuring the transparency necessary to the success of those efforts. FirstNet should also appoint a nonvoting representative from the governors to attend FirstNet meetings and work directly with FirstNet personnel and consultants as an additional interface with the States.

³ See Potomac Institute for Policy Studies, "What Should FirstNet Do First," at 36 (Sep. 24, 2012) (available at http://www.potomacinstitute.org/attachments/article/1293/FirstNet%20NPSBN%20Report.pdf) ("Potomac Institute Report").

⁴ Id.

Third, facilitate early deployment in those States that are funded and ready to proceed with interoperable network assets. Such early deployment projects can help demonstrate the value of the network while also acting as a test bed for the larger PSBN deployment efforts. In addition, such assets can provide enhanced capabilities for first responders in the very near term, creating additional momentum for the PSBN through demonstrated success of its component parts. It is particularly important that projects that already have funding through State and federal sources be allowed to proceed, lest those resources be reallocated to other pressing needs and therefore lost to the PSBN effort forever.

The Joint Commenters, like all states, are eager and willing to assist in the Herculean effort that will be required to bring the PSBN from concept to reality. The network design and application issues raised in the NOI are clearly central to achieving this goal and must be fully vetted and thoughtfully addressed as expeditiously as practicable. Establishment of the State advisory council will facilitate this process, while development of the business plan and re-starting local infrastructure projects will provide crucial information to inform it. The Joint Commenters urge FirstNet to take these important steps immediately so that it can proceed in an orderly and efficient fashion to meet the obligations and challenges set before it under the Act.

I. FIRSTNET SHOULD DEFINE THE BUSINESS MODEL SUPPORTING THE PSBN

During his opening remarks at the FirstNet Board meeting, Chairman Ginn commented that the PSBN will be the most complicated telecommunications project in the nation's history. The Joint Commenters agree on this view of the enormity of the project. Developing a national, interoperable broadband wireless communications network able to serve the most critical public safety functions will affect every State in the nation and the lives of every one of their citizens. Yet before taking on the task of designing the PSBN network itself, Joint Commenters believe that FirstNet should undertake the difficult work of defining and vetting with the States the national business model that will support this very ambitious and essential public safety service initiative. Indeed, devising a national business model may be more complex than the design of the PSBN itself, as it must define network needs, users, functional and security requirements meeting national security protocols, creation of acceptable cost models, financing, network management and governance, and adequacy of state and federal laws and regulations. The manner in which such issues are resolved will likely play a significant role in determining the optimal network architecture for the PSBN.

The Act provides broad structural guidance, authority and direction to begin the process of creating a business model. The initial steps of establishing FirstNet and seating its Board have already been taken. Those are, however, just the most preliminary steps along a long road to devising a complete business model. The next step should be the development of a cost model or other financial analysis to project how much the PSBN will cost overall, how it will operate, how it will reach and maintain financial self-sufficiency, how it will fund upgrades, and – crucially – how much it will cost each State annually or on a per-user basis. This will require a sophisticated understanding of the existing public and private infrastructure assets available for incorporation into the PSBN, the costs associated with constructing new infrastructure, the timing of various phases of PSBN activation, and other issues involved in operating a complex, nationwide broadband network.

In parallel with developing a cost model, FirstNet should also explore the other side of the business model equation: options for generating revenue from PSBN operations. FirstNet is required by the Act to become self-sustaining through revenues it generates from spectrum leasing and user fees.⁵ Developing a business plan that can credibly achieve that goal is imperative not only due to the statutory mandate, but also because it will build confidence in the ultimate success of the PSBN project necessary to ensure participation by interested stakeholders. It is particularly crucial for States, as it will enable them to anticipate funding outlays and operational capabilities sufficiently in advance to accommodate budgetary and network planning cycles.

While the Act authorizes \$7 billion in appropriations for the PSBN, the majority of that allocation (\$5 billion) is not available to FirstNet until anticipated revenues from the incentive auctions of spectrum currently used by television broadcast stations is collected and deposited into the U.S. Treasury. The Federal Communications Commission ("FCC") has only just begun the process of developing the record necessary to devise the rules applicable to this auction, which will be the first of its kind anywhere in the world.⁶ No one yet knows how long it will take for the FCC to conclude this process, conduct the reverse auction, and collect the proceeds necessary to fund the

⁵ 47 U.S.C. § 1428(b).

⁶ See Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, FCC 12-118 (rel. Oct. 2, 2012).

PSBN. Indeed, no one yet knows whether enough broadcasters will participate in the auction to raise the funds anticipated under the Act. Given this uncertainty, FirstNet must be sure to leverage all resources available to it to the greatest extent possible.

The Act does not anticipate that the PSBN will rely solely on either commercial networks or existing State infrastructure. Rather, part of the planning process envisioned under the Act involves the inventory of State and private infrastructure and assets for potential incorporation into the PSBN. The Joint Commenters welcome the opportunity to participate in this process, and believe that State resources could be critical in enhancing the efficiency and coverage of the network. Where States have assets that can advance the PSBN, they should be encouraged to make them available to this important national effort. However, the business model adopted by FirstNet could have important implications on how State assets could be incorporated. For example, if the model is a public-private partnership, the private company and each State will need to work out the terms of their relationship. Use of state assets by either a federal or private entity may require passage of authorizing legislation, which may take an extended time to enact or may even be blocked entirely.

The critical public safety needs of the States are not solely served by the traditional concept of first responders (*e.g.*, police officers and firefighters). Rather, any significant incident response can include numerous government and commercial entities, utilities (*e.g.*, power and water) and other similar critical infrastructure providers. Indeed, the U.S. Department of Homeland Security ("DHS") defines "critical infrastructure" as "the assets ... so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, public health or safety, or any combination thereof."⁷ The FCC has specifically recognized utilities and critical infrastructure providers in this regard.

The wide-area network requirements of utilities are very similar to those of public safety agencies. Both require near universal coverage and a resilient and redundant network, especially during emergencies. In a natural disaster or terrorist attack, clearing downed power lines, fixing natural gas leaks and getting power back to hospitals, transportation hubs, water treatment plants and homes are fundamental to protecting lives and property.⁸

⁷ Department of Homeland Security, "Critical Infrastructure Sectors" (*available at* http://www.dhs.gov/criticalinfrastructure-sectors).

⁸ *See* Federal Communications Commission, "Connecting America: The National Broadband Plan," pp. 270-71 (*available at* http://www.broadband.gov/download-plan) ("National Broadband Plan").

Numerous states already include utilities and other critical infrastructure providers within their public safety and incident response planning.⁹ Ensuring that providers of such critical infrastructure services have access to reliable communications through the PSBN can assist in a more-seamless incident response and better sharing of information, consistent with existing State public safety plans.

As importantly, critical infrastructure providers may also have key assets to support a broadband network, such as rights of way and tower space, as well as funding to invest in construction, maintenance, and operation of broadband facilities.¹⁰ Developing a model that supports these users when considering the construction of the PSBN could also further the vision of the National Broadband Plan to provide (1) broadband service to 100 million Americans by 2020; and (2) every American community affordable access to at least 1 gigabit per second broadband service to anchor institutions such as schools, hospitals, and government buildings.¹¹ The Joint Commenters believe that a business model that supports these additional national interests can tap into sources of additional funding necessary to support the long-term development and sustainability of the PSBN, and thus should be seriously considered by FirstNet.

The development of a credible business plan is important for another very practical reason. While the Act contemplates the creation of single, nationwide network architecture, it does not address the possibility that a State will determine that its needs will not be met by the resulting PSBN or that the associated costs are prohibitive, and therefore chooses not to participate. Such an outcome would be made much less likely by giving States an early, consistent, and significant role in resolving the myriad issues facing FirstNet, starting with development of the business model. By establishing a credible roadmap toward self-sustaining operation of the PSBN in a manner that

⁹ See, e.g., Letter from Robert Chisel, Assistant Director, Nevada Department of Transportation, to Marlene H. Dortch, Secretary, Federal Communications Commission, FCC Docket No. 06-229 (Oct. 18, 2010) (discussing existing private utility use of public safety spectrum as part of Nevada Shared Radio System) (available at http://apps.fcc.gov/ecfs/document/view?id=7020917376); Regional Utility Coordination Plan, Portland, Oregon/Vancouver, Washington Metropolitan Area (Feb. 14, 2005) (discussing coordination procedures between public safety entities and utilities in case of emergency) (available at http://www.ocem.org/Plans/Regional_Utility_Coord_Plan_no_Tab_A.pdf)

¹⁰ For example, a report prepared by the Utilities Telecom Counsel estimated that utilities would spend \$3.2 billion on telecommunications equipment and services in 2011, with spending on wireless communications as a proportion of overall telecom spending expected to double (to 50%) over the next five years. *See* Utilities Telecom Council, "Utilities Telecom Spending Market Forecast" (Sept. 2011) (summarized at http://www.utc.org/utc/utilities-telecom-market-spending-forecast-september-2011).

¹¹ See National Broadband Plan at p. XIV.

addresses State needs with a reasonable cost structure, FirstNet will give States the predictability necessary to commit to and continue to support such a long-term project.

II. FIRSTNET SHOULD ESTABLISH A STATE ADVISORY COMMITTEE

The FirstNet Board is composed of eminently qualified members with experience in technical and business areas relevant to deployment of a large-scale broadband network. As noted by the National Governors Association ("NGA"), however, none of those members is currently a state official.¹² As NGA stated, "[g]iven the role governors and states will play in making the public safety network a reality, it is imperative that state perspectives and priorities are well-represented."¹³

Congress clearly intended for States to play a critical role in the PSBN's development and operation. For example, the Act directs FirstNet to consult with the States with respect to the construction, deployment, and operation of the PSBN.¹⁴ It also directs FirstNet to use, to the maximum extent economically desirable, existing infrastructure of the States in the PSBN and to take into account the plans developed through the State and local planning process.¹⁵ In addition, States will also be called upon to provide a significant portion of funding to sustain the PSBN, even assuming that all anticipated federal funding materializes as planned, in addition to matching resources to plan and implement the Act.¹⁶ Given the uncertainty in the amount and timing of FirstNet's funding, it is all the more critical that FirstNet draw upon all assets available as efficiently as possible.

Thus, States are an important partner for FirstNet, but they will also be the primary users of the PSBN. As such, they are an invaluable resource in optimizing the design and operation of the network to meet their specific needs. For example, the territory of the Joint Commenters is composed of rugged terrain stretching over vast and often remote areas. In such remote regions of

¹² See National Governors Association, "FirstNet Board Appointments a Critical First Step" (Aug. 20, 2012) (available at http://www.nga.org/cms/home/news-room/news-releases/page_2012/col2content/governors-firstnet-board-appoint.html).

¹³ Id.

¹⁴ See 47 U.S.C. § 1426(c)(2)(A).

¹⁵ *Id.* at §§ 1422(b)(2)(B), 1426(c)(3).

See, e.g., id. at §§ 1428 (requiring network user fees for public safety entities that use the PSBN), 1442(b)(1) (requiring States to contribute at least 20 percent of costs of carrying out planning and implementation activities).

the country, there is often no commercial service available and no plans to extend such service offerings, leaving state and regional facilities as the only communications infrastructure available. Further, since much of this territory is under federal control, close coordination between State and federal authorities will be critical. The challenges faced by first responders in these Western states are likely to be far different from those faced in more urban settings and densely populated areas. States have extensive experience in dealing with their own set of challenges, and that knowledge base is an important resource for FirstNet. For example, in order to combat the common enemy of forest fires in the intermountain region, the Joint Commenters' firefighting resources have created a regional approach to combine and coordinate their forces. Local and State firefighting resources rely on agreements with federal agencies such as the Bureau of Land Management (BLM), Forest Service and the Park Service to ensure that adequate resources are available to respond and coordinate through Unified Command and predetermined radio frequencies for communications. FirstNet should leverage regional relationships and strategies that have proven successful and cost-effective to enhance the PSBN's capabilities.

The Joint Commenters recommend that the FirstNet Board, in cooperation with the nation's Governors, create an executive Advisory Committee consisting of current State executives with relevant technical and business expertise.¹⁷ Such a dedicated committee would establish a direct conduit for dialogue between the States and FirstNet, providing an avenue through which States can support FirstNet's efforts while also ensuring the transparency necessary to the success of those efforts. In addition, FirstNet should appoint a non-voting representative from the governors to attend FirstNet meetings and work directly with FirstNet personnel and consultants as an additional interface with the States. Implementing these proposals would help FirstNet comply with the Act's mandate for State involvement in PSBN affairs. As importantly, it would enable FirstNet to tap into a deep reservoir of invaluable talent and knowledge while leveraging regional interoperability arrangements and governance structures already in place. This truly would be a win-win situation that would promote the national interest in creating the best PSBN possible.

III. FIRSTNET SHOULD FACILITATE EARLY DEPLOYMENT WHERE PRACTICABLE

Given all of the challenges it faces (including funding issues), FirstNet is unlikely to be able to begin deploying the PSBN for quite some time. Thus, to the extent States are in a position to

¹⁷ See 47 U.S.C. § 1425(a)(2) (authorizing FirstNet to create standing committees).

deploy interoperable infrastructure that can eventually be incorporated into the PSBN, they should be encouraged to do so. By jumpstarting the process of network deployment, such projects not only provide advanced broadband capabilities to aid first responders, but also generate valuable experience and information on how such networks operate in the field under real-life conditions. Moreover, any additional funding for construction and deployment as well as operational and maintenance support they could bring to the PSBN would help alleviate potential funding deficiencies, especially in the short run.

In this regard, the Joint Commenters commend the Board for taking an immediate interest in the seven Broadband Technology Opportunity Program ("BTOP") grants awarded in 2010 by NTIA to develop public safety broadband systems. On May 11, 2012, NTIA partially suspended those BTOP projects to ensure interoperability with the eventual FirstNet design for the PSBN. In its first board meeting, FirstNet adopted a resolution directing the Planning and Technology Committee Chair, in coordination with the Assistant Secretary for Communications and Information, to examine these projects and provide input to NTIA as to whether and how these projects can support the development of the nationwide, interoperable PSBN.¹⁸

Joint Commenters strongly urge FirstNet and NTIA to remove the hold on funding for those BTOP projects immediately. Delay in or loss of federal funding may result in the loss of state funds allocated to these projects, and would impose an opportunity cost in terms of the time and effort devoted to those projects by State officials who could otherwise have been working to address other public safety communications needs.¹⁹ By contrast, allowing some or all of the BTOP programs to move forward may enable some of the Joint Responders and other interested parties to develop important information about applications, network performance and operational challenges associated with a public safety broadband network. With this experience, the Joint Responders and all other parties would be better positioned to comment on the questions raised in this NOI. Through the consultative process with the States, FirstNet would then be better informed to develop the optimal technical architecture for the network.

IV. FIRSTNET CAN TAKE ADDITIONAL STEPS TO PROMOTE THE PSBN

Joint Commenters believe that the three actions discussed above should be FirstNet's top priority. Below we discuss three subsidiary steps that would support those actions as well as the general development of the PSBN.

A. FirstNet Should Work to Integrate All National Broadband Programs

As an independent authority within NTIA, FirstNet is uniquely situated to take advantage of NTIA's ability to develop a national programmatic requirement across all agencies to leverage all existing and future networks, programs and funding authorizations related to deploying and delivering any government-funded broadband service. NTIA, the Federal Communications Commission, the Department of Energy and other agencies no doubt are proceeding with national programs that assist with the delivery of broadband capabilities.²⁰ These capabilities include wire line, wireless, and satellite platforms and have authorized funding sources.

The Act requires that the PSBN leverage existing networks and capabilities. This requirement did not exclude federal programs, existing or future. The Joint Commenters, like all states, struggle to manage government spending by (among other things) eliminating redundant and duplicative services where they exist. While they are sometimes the beneficiaries of federal broadband programs serving health, education, energy and the general public, states lack the authority to integrate such programs. NTIA, working with the current and future administrations, as well as with Congress, must develop a balanced national policy with respect to all aspects of federally funded broadband programs. FirstNet must take the lead in establishing a national broadband delivery integration program.

²⁰ Prior to the passage of the Act, the NTIA began administering the national Broadband Technology Opportunity Program pursuant to waivers issued by the FCC. In 2011, the FCC approved a transition from the Universal Service Fund High-Cost Program to a new annual \$4.5 billion Connect America Fund (CAF) to support broadband Internet, transitioning funding away from traditional copper voice-only service funded by the Universal Service Fund. The FCC has stated that the CAF's goal is to connect 7 million unserved rural Americans to broadband in six years, and puts the nation on a path to connect all 19 million unserved residents by 2020. Additionally, the FCC has established rural Health Care Reform Proceedings focusing on Broadband Services Program ("BSP"). The Department of Energy has other programs to deploy robust "Smart Grid" and Smart Meter" networks and programs all using broadband delivery platforms.

B. FirstNet should provide prompt baseline planning guidance with respect to PSBN planning grants

The Act charges NTIA with establishing a grant program to assist state, regional, tribal, and local jurisdictions with identifying, planning, and implementing the most efficient and effective means to use and integrate the infrastructure, equipment, and other architecture associated with the nationwide PSBN to satisfy the wireless broadband and data services needs of their jurisdictions.²¹ Congress has made available to NTIA \$135 million to support planning activities. It is anticipated that grant guidance and program details will be made available during the first quarter of 2013 with awards announced late in the summer of 2013. It also anticipated that States will supply a 20 percent match with respect to any grant award.²²

The timing of the planning grant award cycle is inconsistent with the budget and appropriations schedules of most state legislatures, particularly those states that meet every two years and establish biennial budgets. At the heart of any conceptual network architecture exists specific baseline data that is necessary to support the geographical and technical challenges facing any network design. FirstNet needs to work with state Governors and provide a baseline budgetary requirement necessary for a State to participate in or consider participating in the initial planning of the PSBN, including the state-specific radio access network of the PSBN. Base line budgetary guidance must be supplied to the states prior to the beginning of the 2013 State legislative cycles.

C. FirstNet should develop a standard confidentiality agreement

The Act directs FirstNet to assess existing commercial and public broadband assets and to incorporate them into the PSBN to the extent economically practicable. The technical characteristics, geophysical location, capacity, aging characteristics, legal limitations, ownership, use and many other physical plant attributes of such broadband infrastructure assets are proprietary and often trade secret information. Thus, in order to make the detailed assessment contemplated by the statute, FirstNet will need to establish a mechanism to assure the owners of these assets that their information will be appropriately safeguarded. In order to do so, FirstNet should adopt a standard form Memorandum of Understanding or other protective agreement to cover the base line discovery requirements of network planning. This will require FirstNet to

²¹ 47 U.S.C. § 1442(a).

²² *Id.* at § 1442(b)(1).

identify, with the support of the States and private sector, the appropriate terms, conditions and covenants for exchange, protection, and use of essential network information.

D. States have a unique obligation to tribal nations under the Act

Under the Act, the Assistant Secretary and FirstNet are directed to take action necessary to make grants to States and require States to assist tribal nations to, among other things, identify, plan and implement the nation's PSBN on tribal nation lands. In addition, the Act directs the States to support the needs of tribal nations to satisfy their accessibility to wireless communication and data services²³.

Prior to the passage of the Act, States did not have this express responsibility with respect to communication services on tribal lands. The national architecture, described at the initial FirstNet Board meeting, utilizes a commercial footprint service model and approach to delivering broadband wireless communications and data services nationally including service to tribal lands. The nation's tribal lands are for the most part unserved generally by commercial carriers, particularly western tribal lands. The unique support required by the Act of the States with respect to tribal nations together with any proposed PSBN service solution must be specifically defined and addressed at the onset of any planning.

The Joint Commenters have long respected the independence and the jurisdiction of the Sovereign Nation status of tribal lands in the States. The business model and network architecture that FirstNet adopts to implement the Act must also embrace recognition of the relationship and status tribal nations and the States have with one another.

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²³ The Act §6302(a)

The Joint Commenters appreciate the fact that FirstNet faces a daunting task in coordinating the design, construction, financing, and operation of a national PSBN to serve the disparate needs of first responders across the country. They look forward to participating in the process of joining with FirstNet and other States to meet those challenges, and stand ready to provide assistance and support wherever possible. Joint Commenters hope that these comments have advanced this cause by helping to prioritize the critical tasks that FirstNet should undertake.

Respectfully submitted,

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October 31, 2012