

Written Testimony of
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First Responder Network Authority
Before the
Committee on Energy and Commerce
Subcommittee on Communications and Technology
United States House of Representatives
Hearing on
“Status of the Public Safety Broadband Network”
February 2, 2016

Introduction

Chairman Walden, Ranking Member Eshoo, and Members of the House Subcommittee on Communications and Technology, on behalf of the First Responder Network Authority (FirstNet), I appreciate the opportunity to testify on the progress that FirstNet has made since last June.

When FirstNet last testified, we discussed FirstNet’s accomplishments up to that point. We had issued 13 Requests for Information (RFIs), we had released a Special Notice along with a series of draft Request for Proposal (RFP) documents and answered more than 650 questions relating to those documents, we were in the planning stages of an industry day that was held in August 2015, and we were executing our 2015 consultation efforts with what ultimately turned out to be 49 States, 5 territories, and the District of Columbia. The organization felt confident that we were “doing what we said we would do,” and as we sit once again before you today, I can assure this subcommittee that we are honoring our commitments and obligations. We have issued the RFP, and we are moving forward both with speed and with confidence that FirstNet will accomplish what Congress created for us to achieve.

Background

With the passage of the Middle Class Tax Relief and Job Creation Act of 2012 (Act), Congress directed FirstNet to ensure the deployment, maintenance, and operation of the only nationwide public safety broadband network (NPSBN) on 20 MHz of prime 700MHz spectrum, in a unique public-private partnership. To successfully accomplish this task, FirstNet has operated in an iterative, cooperative manner, consistent with the intent of the Act, consulting with public safety, the states and territories, tribal nations, federal authorities, and industry. Collaboration amongst these various stakeholders is a critical component to the successful deployment of the NPSBN with the long term sustainability of the network that Congress mandated.

While the NPSBN will be deployed through a public/private partnership, the most important stakeholder is public safety. This network is intended to meet the needs of public safety, 24 hours a day, 7 days a week, and 365 days a year. Each first responder who dedicates his or her life to this mission does so not only to protect everyone in this room, but every community across the United States. This is why it is so critical to ensure that public safety is able to

provide key inputs into the planning and deployment of this network. Indeed the public safety community asked Congress for this network and the public safety community will continue to play a critical role in the development of this network.

Since June 2015, FirstNet has accomplished much with the aforementioned consultation efforts leading to robust public safety input into our RFP. We received data from over 11,600 public safety entities representing 1.6 million public safety personnel from 54 states and territories and seven federal agencies. We provided baseline data to each state and territory, and the public safety submissions informed our comprehensive RFP in areas such as coverage, capacity, and public safety incident locations. FirstNet wants to give a tremendous amount of credit to the states, territories, tribes, and federal agencies for all their hard work in participating in outreach and collecting and submitting all of this data, as well as the local and tribal agencies that responded to the request.

The first round of consultation and outreach was very successful, and resulted in the accumulation of key state data that has ultimately informed the RFP documents released last month. As noted earlier, FirstNet held initial consultation meetings with 55 of the states and territories. FirstNet intends to build upon this success in 2016. FirstNet has sent all states and territories their 2016 consultation packets and the FirstNet team is working closely with states, territories, and the public safety community to organize our next round of meetings throughout the nation.

The partnering and teaming aspects of the network are key components of consultation that we have reiterated in all of our meetings and outreach. FirstNet believes that in order to expand our coverage into the most rural parts of the nation, rural infrastructure providers and vendors and smaller operators need to be part of the solution. Leveraging existing infrastructure will be a key part of the solution especially in rural America. Stakeholders consistently raised this point throughout the consultation meetings, and FirstNet responded by making rural partnerships an evaluation factor in our RFP.

On January 13 of this year, we released our RFP for the nationwide network. This is a significant step for the network because it is the formal structured process that will select our partner who will deploy the NPSBN. The release of the RFP is the result of three years of hard work beginning with the creation of the Board back in August 2012, establishing the start-up organization of FirstNet, and staffing it with some of the most talented individuals from across the country that are committed to supporting public safety's communication needs. This RFP incorporates a performance based approach to contracting by establishing 16 key objectives each offeror must meet, so as to achieve the best possible solution – one that allows offerors to be innovative, while ensuring that public safety gets the network, features, functions, and reliability that they deserve. I am proud of the hard work by public safety, states, territories, tribes, industry, the FirstNet team, and others to make this RFP a reality.

FirstNet has created an environment where we expect competitive and innovative responses to the RFP. Establishing a platform for industry to be able to respond in a manner with their own dynamic solutions based on a set of objectives is the foundation of the FirstNet network. From the very beginning, FirstNet has been dedicated to competition that provides a fair playing field

for all interested players. This RFP establishes the mechanism to provide that vigorous competition, allowing industry and the market-place to help establish the solution that can most closely meet the objectives of building, operating, and maintaining a self-sustaining NPSBN.

Release of the Request for Proposal

FirstNet's RFP follows more than a year of dialogue with the public safety community and industry on the objectives and scope of the RFP to find a network solution. Throughout this process, FirstNet has remained committed to its mission mandated by Congress, ensuring the successful deployment and operation of the NPSBN.

The RFP that we issued is intentionally different in many ways from the traditional requirements-based RFPs that are commonly issued by the federal government. We applied lessons learned from other RFPs and issued an objectives-based RFP to let industry do what they do best and propose innovative solutions, driving competition and bringing creativity to provide the best solution for public safety. FirstNet has developed an RFP that we believe will foster a competitive environment that attracts multiple offerors that propose a variety of solutions allowing FirstNet to fulfill its mission to ensure the development, deployment, and operation of the country's first nationwide, broadband network dedicated to public safety.

Public safety's goals and needs are the foundation of the RFP. With this approach in mind, FirstNet envisions a 25-year public-private partnership, suggesting that solutions may include various partnerships and business arrangements that monetize new public safety market offerings via devices, applications, and other value-added benefits and services. FirstNet believes that the eventual awardee can lead the market in these new opportunities and be at the forefront of developing new solutions that enable public safety to do their jobs more effectively.

It is worth noting that the development of the RFP has incorporated all of the steps that we previously described to this subcommittee over the past two years. We have maintained an open, iterative, and transparent dialogue with public safety, states and territories, tribes, industry, and other stakeholders that will hopefully allow public safety to reap the benefits when FirstNet awards the contract and the FirstNet network is ultimately deployed.

The Solution: An Objectives-Based Approach

The network solution sought by FirstNet would guarantee seamless interoperability for public safety across each of the 56 states and territories. FirstNet expects the solution to meet 16 objectives identified in the RFP Statement of Objectives (SOO):

- Building, deployment, operation, and maintenance of the NPSBN
- Financial sustainability
- First responder user adoption
- Device ecosystem
- Applications ecosystem
- Accelerated speed to market
- User service availability

- Service capacity
- Cybersecurity
- Priority services
- Integration of state-deployed Radio Access Networks (RANs)
- Integration of existing commercial/federal/state/tribal/local infrastructure to support NPSBN services
- Life-cycle innovation
- Program and business management
- Customer care and marketing
- Facilitation of FirstNet's compliance with the Act and other laws

The solution will provide for:

- The deployment and provisioning of a commercial nationwide Core Network (Core) and RAN services;
- Backhaul, aggregation, and the use of nationwide transport networks and operation centers;
- A device ecosystem and application ecosystem;
- Use of existing network infrastructure;
- Deployable capabilities;
- Use of operational and business support systems; and
- The integration and operations and maintenance, to allow for ongoing evolution of these systems to ensure a fully functioning operational wireless 3rd Generation Partnership Project (3GPP) standards-based Long Term Evolution (LTE) NPSBN throughout its lifecycle.

By adopting an objectives-based model, rather than a traditional requirements-driven model and socializing this model with industry for approximately 18 months, FirstNet expects that offerors will achieve these broad objectives through innovative solutions that are not limited by any particular type of solution or entity. The RFP highlights the desire for maximum opportunity and flexibility in the development of innovative solutions for the NPSBN. In other words, FirstNet does not want to be overly prescriptive in how industry provides solutions, and instead seeks service and solutions that will work best for public safety and encourage innovation and teaming partnerships.

Teaming is a key aspect of the overall network. As FirstNet looks to fulfill our rural deployment milestones at each phase of construction, the integration of rural infrastructure partners into the FirstNet network is an important component of our evaluation factors.

FirstNet believes that the RFP encourages all entities, whether traditional wireless incumbents or those new to the public safety marketplace, to submit their proposed competitive solutions. The RFP is structured to acquire a solution that gives public safety the ability to take advantage of the marketplace and the competitive pricing that comes with it.

Paying for the Network

FirstNet was able to creatively develop a business model that will allow for our partner(s) to pay for the services to deploy, operate, maintain, and recapitalize the network while achieving financial sustainability. Industry experts, public safety personnel, and hearing witnesses alike, have testified that the \$7 billion that Congress allocated to FirstNet in the Act will not be sufficient to deploy and maintain the network nationwide. Through our modeling and analysis, we determined that a combination of the revenue generated by the excess network capacity, along with user fees and fees to access the FirstNet core network, will allow the NPSBN to become self-sustaining while still creating an economic environment that would attract offerors and encourage a win-win partnership to succeed in meeting public safety's objectives.

Therefore, FirstNet created a model that allows the awardee to receive up to \$6.5 billion in funding from FirstNet with the awardee making regular minimum payments back to FirstNet over the life of the contract. An offeror must propose payments at least at these levels as part of its solution to promote FirstNet's financial sustainability.¹ These levels establish a minimum level of support based on an assumed level of effort by a private entity and FirstNet in the NPSBN partnership. Importantly, the payments may be higher if driven by competition or if the partner wants FirstNet to take on more responsibility for key functions.

All revenue generated in excess of FirstNet's operating costs will be reinvested in the NPSBN, as required by the Act.

Content, Process, and Timeline

The RFP, which follows the Federal Acquisition Regulation (FAR), is comprised of 13 sections, and is currently 508 pages, 342 of which are attachments to the main RFP. FirstNet has offered all interested parties an opportunity to submit RFP clarification questions no later than February 12, 2016. Following the release of our answers to the RFP clarification questions, FirstNet will hold a pre-proposal conference on March 10, 2016, with the format similar to the industry day events that were previously held.

Section M of the solicitation identifies a multiphase approach. Phase I is submission of capability statements. This phase allows offerors to demonstrate they are capable of performing the work and allows the government to advise the offerors about their potential to be viable competitors or not. However, notwithstanding any advice provided by the government that they are not considered viable competitors, they may still participate in the acquisition by following the instructions provided in Section L and submitting a proposal.

Capability statements are due no later than March 17, 2016. This process allows the government to continue the iterative process and provide feedback as to whether the company is considered a viable competitor before their proposal submissions are due no later than April 29, 2016.

¹ These levels refer to the minimum payment levels that must be paid to FirstNet on an annual basis beginning with \$80 million from years 1-5 and concluding with \$430 million from years 20-25. See section M of the RFP for further detail.

Following the proposal deadline, FirstNet will evaluate the proposals, with an expected contract award in the fourth quarter of 2016. Please be mindful that the dates discussed in this testimony are estimates based upon what we know today. Many factors could impact the timing of each RFP milestone.

State Plans

Upon award of a contract, the delivery of a plan to each state and territory's governor is the next key milestone. This "State Plan" will be used to guide and inform the governor of each state and territory on FirstNet's intended build-out of the RAN in each state or territory. The Act requires the governor to decide whether the state or territory will assume responsibility for deploying and operating an interoperable RAN that connects to FirstNet's core network, or have FirstNet deploy the RAN. FirstNet anticipates that state plans will be delivered to the states and territories in 2017. . It is important to note that much like the RFP timeline, this too is subject to change since the outcome of the RFP will inform each individual state plan. Until FirstNet has a partner(s) on board, no state plan can be completed.

Consultation

Consultation is critical to establishing lasting partnerships with the states, territories, tribal nations, and public safety users. Moreover, consultation helps ensure that FirstNet staff have captured the requested inputs of FirstNet's future customers. Ultimately, FirstNet believes its consultation efforts will lead to the provision of better planned public safety services and products, and increase adoption of the NPSBN.

2015 State Consultation and Outreach

As described earlier, FirstNet's consultation meeting with the states and territories provided valuable feedback that was used by FirstNet to develop the RFP. FirstNet began each such consultation meeting by announcing four goals:

- (1) **Strengthen the relationship with the state/territory.** From the process of planning the meeting through the event itself, the initial consultations allowed FirstNet to strengthen existing relationships and establish new ones.
- (2) **Provide FirstNet updates.** By working with the states and territories, the initial consultation meetings included nearly 4,000 attendees from a wide range of public safety disciplines and across all levels of government. The meetings provided an effective way for FirstNet to share information and increase discussion and awareness among stakeholders nationwide. Topics included FirstNet's mission and vision, evolving acquisition approach, and data collection efforts.
- (3) **Learn about the unique needs of each state/territory.** The consultations allowed each state and territory to share its unique inputs, needs, and desires. For example, FirstNet heard details about each state and territory's governance structure, demographics, and geography. In addition, states and territories shared valuable information concerning the types of events (*e.g.*, natural disasters, special events, and unplanned events) that can affect public safety operations within the state/territory. In many cases, FirstNet also

captured how states and territories could have benefited from using FirstNet's network during past events.

- (4) **Discuss next steps.** FirstNet reiterated the importance of collaboration with the states and territories, and continuing consultation efforts. In addition, FirstNet asked states and territories to begin collecting user and operations data as well as coverage objectives to identify priorities.

FirstNet worked with states and territories to facilitate a forum where public safety officials could discuss real-life examples and use-cases to illustrate how the FirstNet network could be used once deployed. The use-cases provided several unique state or territory specific scenarios concerning:

- large planned events,
- natural disasters,
- emergency incidents, and
- day-to-day operations.

In each scenario, the existence of the NPSBN would have improved public safety personnel's ability to effectively respond, communicate information, and maintain their own safety and the safety of those whom they protect and serve.

The findings from the consultation meetings reinforced to FirstNet in several areas the unique challenges facing the NPSBN deployment. They showed us just how diverse and locally focused the network will need to be. While there are a number of similar themes that ran through the majority of the use cases, it was clear that local problems required unique solutions. FirstNet expects that the NPSBN will allow for improved communication and coordination between all agencies. It was also clear in some of the use-cases that agencies from other states and territories would assist in the recovery efforts, thereby further complicating the same issues. A single, nationwide network that all public safety agencies can utilize is imperative to providing an opportunity to solve many of the voice, video, and data interoperability issues currently experienced by public safety. This is one of the key benefits of the network that was expressed by stakeholders over and over at the 2015 consultation meetings.

2016 Consultation and Outreach

In, 2016 FirstNet will build on our work in the states and territories through the next stage of consultation. Taking many of the lessons learned from our ongoing dialogues throughout the country, FirstNet will continue to engage with the states and territories through an open, transparent, and coordinated effort to enhance the discussions with the states and territories and their public safety representatives across all levels of government – local, state, tribal and federal. FirstNet plans to expand its outreach and focus its consultation engagements in the next stage of consultation. We will seek to reach an even larger audience with our outreach team to further educate the public safety community on our goals, while we focus our consultation with the states and territories to ensure that decision-makers in the states and territories have the best information that FirstNet can provide.

As such, FirstNet has developed three goals to guide our consultation activities. These goals include:

- (1) expanding outreach and education with state, territory, tribal, local, and public safety entities,
- (2) obtaining additional state and territory input to inform state plans and network deployment policies, processes, and procedures, and
- (3) preparing key decision-makers for state plan delivery and network deployment.

To achieve these goals, FirstNet will work towards completing four major milestones with every state and territory:

- (1) **FirstNet/State Single Point of Contact (SPOC) Follow on Meetings:** In this engagement, FirstNet staff will meet with the SPOC to discuss the 2016 consultation approach and plan for the ongoing outreach engagements throughout the 2016 calendar year.
- (2) **Coordinate Participation in Governance Body Meetings:** FirstNet staff will attend and participate in state and territory communications governance body meetings in 2016. The purpose of these engagements will be to follow up on initial consultation meetings, bring new information about FirstNet to the state or territory, continue to build relationships, and learn more about activities in each state and territory.
- (3) **Establish Consultation Task Teams (CTT):** FirstNet will continue to consult with states and territories on critical policies and procedures for the nationwide network, such as issues like quality of service, priority and preemption (QPP). The Public Safety Advisory Committee (PSAC) assembled task teams of subject matter experts to provide initial advice and recommendations on these issues. FirstNet would like to explore further task teams with the states and territories to discuss and engage on the critical factors that need to be considered at the local and state level.
- (4) **Schedule Executive Consultation Meetings:** FirstNet will work with states and territories to schedule a consultation meeting with the key executives, public safety officials, and tribal leaders in each state and territory that are important to the state plan decision and network deployment. The goals for this meeting are to provide states and territories with the most up-to-date information on state plans, network deployment, FirstNet's value to public safety and business model, and our process to create a public/private partnership to achieve our mission. The timing and make-up of these meetings will vary from state-to-state.

We understand that not all states and territories have the same needs and recognize that some states and territories may choose not to schedule all four of these meetings this year due to timing and other constraints. FirstNet aims to provide to states and territories the information and preparation that they require and we will continue to prioritize a close working relationship with stakeholders across the country to plan for the deployment of the NPSBN.

Federal Consultation and Outreach

The intended end users of the FirstNet network do not stop at the local, state and tribal levels however. Since our last appearance before this subcommittee, FirstNet staff has conducted numerous engagements with a variety of federal organizations across the country. FirstNet also worked closely with federal agency points of contact to complete an initial data collection effort that we intentionally aligned with the data collection effort conducted with the states. The data we received allowed FirstNet to gain a more detailed understanding of the public safety presence at all levels of government and allowed the agencies to describe their unique mission and needs to FirstNet.

For 2016, FirstNet will continue its consultation with federal agencies to gain a more complete understanding of agency needs and operations. FirstNet has increased its federal outreach staff and will expand the engagement process and focus on key regions of the country of particular interest to federal public safety organizations, as well as those areas where the interaction between multiple jurisdictions results in a strong desire for information sharing and common data access.

The Public Safety Advisory Committee (PSAC)

FirstNet's PSAC continues to be a compelling and driving force behind much of the success FirstNet has experienced over the past year. Chaired by Chief Harlin McEwen, the PSAC released in November a report to the Board on the findings of their most recent task teams: Priority and Preemption (P&P), Public Safety Grade (PSG) and User Equipment (UE). The respective task teams:

- Created incident usage scenarios, use cases and a comprehensive framework for access and applications prioritization.
- Identified critical infrastructure layers that require increased hardening, along with a methodology to filter these asset layers.
- Provided clear and unified feedback on the several subtopics within user equipment including vehicular network systems, bring your own device policies, mobile security and voice assistants.

These task teams met throughout 2015 to provide recommendations in support of the NPSBN. With the strong leadership of Chief McEwen and the PSAC Executive Committee, and support from our technology team, the PSAC was able to leave its mark on the RFP and ensure the voice of public safety was heard.

The PSAC also continues to engage the Early Builders Working Group (EBWG) and the Tribal Working Group (TWG), to leverage their input for the FirstNet team. The five early builders that comprise the EBWG continue to provide FirstNet with critical formal and informal lessons learned from their efforts, while the TWG diligently works to effectively message to tribal nations and first responders who serve tribal communities.

Thus far in 2016, the PSAC has convened two new task teams on the subjects of Local Control and Identity, Credentials and Access Management (ICAM). Similar in structure to the previous groups, these teams will be supported by our technical staff to craft effective and operational objectives. FirstNet anticipates equal success and valuable insights for public safety and the NPSBN from these latest PSAC endeavors.

Tribal Outreach

FirstNet's commitment to continuing its active engagement with sovereign tribal nations remains steadfast. Tribal nations have a tremendous need for the NPSBN. FirstNet's tribal outreach team continues to speak at tribal gatherings, meet with tribal nations, and supporting the SPOC efforts to engage tribal communities.

In 2015, FirstNet's tribal outreach team participated in the primary national and regional tribal organizations' conferences and meetings and state-hosted tribal engagements in an effort to educate tribal nations about FirstNet and to encourage their participation in the State consultation and data collection processes.

In addition, through the PSAC TWG, FirstNet has continued a regular dialogue with delegates from numerous tribal representatives and organizations. The TWG, comprised of representatives from a broad cross section of multi-tribal associations, was established to provide FirstNet advice on tribal outreach, education, and inclusive consultation strategies to ensure participation by tribal jurisdictions in planning for the NPSBN. The TWG provided and supported implementation of recommendations to: expand TWG membership to include a large, land based tribe whose land crosses state geographical borders; target tribal public events at which to offer presentations; undertake a culturally aligned multimedia outreach campaign; and engage with SPOCs during the semi-annual meetings. The TWG will continue its activities throughout 2016.

Conclusion

The Chairwoman of FirstNet's Board, Sue Swenson, often talks about the collective 'we' when discussing the FirstNet project. Those responsible for the successful deployment of the FirstNet network are not simply those of us who work at FirstNet. This is a national effort that includes those individuals who attended consultation meetings and outreach engagements, those groups who responded to the public notices, the vendors that have attended meetings and are part of the teaming lists, the states and territories who are all working to advise their respective governors on their important decisions, FirstNet's eventual partner(s), FirstNet's federal partners, support organizations and stakeholders, tribes, and myriad other people, groups, associations, and entities.

What has been abundantly clear to FirstNet is the absolute need for the NPSBN. We hear about it everywhere we go and in every meeting or conference that we attend. Unfortunately, we are reminded all too frequently – often on the nightly news – of the compelling need to get this network deployed so that we can increase the safety and capabilities of all public safety personnel, and ultimately the safety and wellbeing of our citizens. We are dedicated to delivering a public safety network that meets those needs.

Public safety will judge all of us on our ability to conduct a successful RFP, to select a partner that will be able to meet the obligations of the Act, and to deploy a NPSBN that satisfies the needs of public safety personnel throughout the country. Anything less will be a failure, and failure is not an option when it comes to public safety.

Finally, I would like to thank the FirstNet Board for all of their leadership and hard work that has guided the organization and the FirstNet staff without whom we could not fulfill the many important duties and responsibilities required of us by Congress. A lot of hard work has taken us this far, but now is not the time to sit back and reflect on our accomplishments. Now is the time to double our efforts and to execute for public safety. Deploying this network is a monumental task, but providing the communication tools to all first responders that they deserve is imperative to allow public safety to continue to meet the critical needs of the American people every single day.