



# FirstNet RFP Review

## Introduction

The First Responder Network Authority (FirstNet) released its 508-page request for proposal (RFP) for a Nationwide Public Safety Broadband Network (NPSBN) on 1/13/16. Below are summary “talking points” that are particularly relevant to states and local public safety agencies.

## General

- Estimated contract award date is November 1, 2016 with an estimated start for Initial FirstNet-Deployed radio access network (RAN) States of April 30, 2017. The contract will be for a period of 25 years with a ceiling of \$100B.
- FirstNet requests its contractor to offer such a compelling, differentiated, and competitively priced service that it will be adopted by a majority of eligible public safety entities (PSEs) within four years of award.

## Working with Public Safety

- The contractor must have a strategy collaborating with public safety stakeholders, associations, and other pertinent organizations, such as the Association of Public-Safety Communications Officials (APCO), National Association of State Chief Information Officers (NASCIO), International Association of Chiefs of Police (IACP), and Public Safety Advisory Committee (PSAC).
- There will be a FirstNet-branded, **customer-facing Web-based portal** for public safety users to view and order devices, service offerings, and accessories.
- The contractor must develop and maintain a **web interface tool for sharing state plan information** with governors and/or state decision makers, such as coverage maps, device portfolio, and service plans.

- Agencies will be given a **PSE Home Page**, a customizable home page that provides users with relevant information about their agency and current events and incidents. It will support data feeds that users can subscribe to, including NPSBN network and service status, agency information, alerts, and basic situational awareness of recent nationwide and local incidents.
- The contractor will offer a strategy for **allowing PSEs to own deployable assets**. It will include identifying the roles and responsibilities of PSEs, FirstNet, and the contractor with respect to deployables and temporary coverage solutions.
- The contractor is required to provide application and device ecosystems that support Bring Your Own Device (BYOD).

### **Local Control**

- The contractor will provide a **PSE user interface** to provide local control of its administrative and operational environments, including managing devices, users, applications, and Quality, Priority, and Preemption (QPP) parameters.

### **Rural Users**

- The contractor must demonstrate the intent to use rural telecommunication provider partnerships to provide at least 15 percent of the total rural coverage nationwide.

### **Early Builders**

- Although FirstNet requests bidders to describe how they will acquire, integrate, and assimilate early builder assets if they propose them, FirstNet does not require this to occur, leaving the opportunity for early builders to continue to operate independently.

### **Network Performance**

- FirstNet is requiring 99.99% (“4-9s”) broadband service availability. Any impaired service should be restored within two hours.

- The RFP defines **coverage** as the area where a mobile device can reliably communicate above a minimum data rate. For NPSBN, this is defined as a Long Term Evolution (LTE) Band 14 network capable of providing cell edge data rates of **256 kbps uplink and 768 kbps downlink**.
- FirstNet has defined two types of coverage, “persistent” and “temporary.” Temporary coverage, such as that provided by deployable units or backpack transmitters, may be used to complement persistent coverage. However, temporary coverage does not count toward implementation phase (IOC/FOC) coverage deployment percentage goals.

## Security

- The contractor will operate a security operations center (SOC) that will perform 24/7/365 cybersecurity monitoring of network infrastructure, devices, data, and applications.
- The contractor will formulate and implement minimum-security standards to enable Public Safety Enterprise Networks (PSENs) to connect to the NPSBN. Note that PSENs can range from a 9-1-1 public safety answering point (PSAP) or local agency’s network to a national law enforcement information service.

## Applications and Services

- At minimum, NPSBN services are data, voice services, messaging, machine-to-machine, virtual private network (VPN), video, unique public safety mission-critical services, and location services.

## Devices

- FirstNet has directed the contractor to offer a **Band 14 device portfolio** that includes:
  - Smartphones, tablets, modems, and in-vehicle routers that support Band 14 and combinations of other bands and can maintain session continuity when switching from band to band
  - Vehicular Network Systems (VNS) built into first responder vehicles that support a rapid response, both in and out of coverage range

- Machine-to-machine configurations, including for video cameras and drone operation

### **Subscriber Pricing**

- Pricing details will be provided on public safety priority and preemption, post-paid and pre-paid service on both Band 14 and non-Band 14 networks, including any volume discounts. Bidders also supply anticipated device prices.
- FirstNet plans to offer pooled data usage monthly user fees.
- The contract assures NPSBN subscribers pay no more than the lowest price available by requiring the contractor to agree to provide a most favored customer pricing.

### **Financial Model**

- Payment from FirstNet to the contractor can be up to \$1.5B for each IOC/FOC deployment release, \$1B for nationwide elements, and \$6.5B total.
- The financial model also includes annual fixed price payments to FirstNet by the contractor for each of the 56 states and territories.
- Upon failure to meet public safety user adoption and use performance metrics, FirstNet will assess a disincentive payment.

### **Environmental Compliance**

- The contractor must comply with all applicable environmental and historic preservation laws and regulations of any federal, state, and/or local government, and will be the party of record for all permits.
- FirstNet's contractor may request federal government assistance to resolve permitting issues whenever it encounters delays that may impact its deployment schedule.

### **Deployment Timeline**

- The first deployment release occurs 6 months after award and offers non-Band 14 commercial services as well as priority, VPN interworking with QoS, and

Voice over LTE (VoLTE). It offers hosted identity solutions for agencies not implementing their own.

- The contractor must meet 50% of their public safety connections target by 2 years from award, and 100% by 4 years from award; an aggressive schedule.

## **Summary**

FirstNet's request to bidders for proposals for a nationwide public safety broadband network is arguably clear and concise, yet encompassing. It is ambitious, asking much from a single winner – requesting not only the deployment and operation of a nationwide LTE network built to public safety grade standards for resiliency and hardening not typically found in commercial wireless networks, but also for complete application and device ecosystems as well as sales, marketing, and support with aggressive adoption targets and financial consequences for underperforming.

In the RFP, FirstNet has demonstrated that it takes security of the network, public safety users, devices, and applications very seriously, communicating not only cybersecurity concept and philosophy but also integrating into deployment and operations requirements. It directs bidders to offer public safety pooled service plans and support BYOD, all which are important items for rural, small, and volunteer agencies. In addition, emphasizing collaboration with rural telcos may strengthen rural quality of service, encourage political acceptance and boost adoption momentum. In defining coverage, FirstNet remains faithful to specifying LTE Band 14 coverage, even for rural milestone benchmarks.

However, for states the acquisition is not without risks. For example, the structure of the public partnership proposed by FirstNet poses risk by putting all its eggs in a single awardee's basket and giving the winner the responsibility for proposing pricing and coverage, both crucial elements for the ultimate public safety end users. FirstNet requires aggressive adoption rates of its partner, despite public safety's historically slow and laborious budget cycles, and the fact that key potential bidders such as Verizon and AT&T are already providing competing network services, including priority, which may slow and/or reduce adoption.

A successful proposal requires bidder teams include a large commercial service provider with a nationwide footprint, necessary for rapid deployment while leveraging existing infrastructure and for offering FirstNet-branded non-Band 14 service as its first deployment release. Further, the procurement requires a robust field of viable competitors to drive the appropriate balance of service cost and rural coverage.<sup>1</sup>

However, against this backdrop, at this time only AT&T has thrown its hat in the ring, while other major players consider their options.<sup>2</sup>

Despite the concerns mentioned, considering the breadth of NPSBN scope, the FirstNet team has done an admirable job at this first leg of the acquisition, successfully delivering to industry a solicitation that truly encompasses the spirit and much of the intent of the public safety founders of the Act. Time will tell as we move into the bidding phase whether bidders are as willing and able to embrace these objectives in their proposals.