

---

## Table of Contents

<b>1</b>	<b>Operational Architecture.....</b>	<b>1</b>
1.1	Inherently Governmental Functions.....	1
1.2	Operational Architecture View .....	1
1.3	Operational Architecture – FirstNet Functions.....	1
	A.0 FirstNet Implementation and Oversight of the Act.....	1
	A.1 FirstNet Governance, Program Management, and Execution .....	2

---

# 1 Operational Architecture

## 1.1 Inherently Governmental Functions

The First Responder Network Authority (FirstNet) is responsible for ensuring the overall success of the Nationwide Public Safety Broadband Network (NPSBN). In order to do so, FirstNet has developed an Operational Architecture describing high-level functions that FirstNet believes should be executed for the NPSBN to succeed. The Operational Architecture captures the potential scope of FirstNet’s overall responsibilities with regard to the NPSBN post award.

Section J, Attachment J-7, Operational Architecture, presents only the inherently governmental functions from the Operational Architecture. As such, these functions would be conducted by FirstNet. An inherently governmental function is defined as any function related to the public interest that mandates performance by government employees. An inherently governmental function includes activities that require either the exercise of discretion in applying government authority or the making of value judgments in making decisions for the Government. Governmental functions normally fall into two categories: the act of governing (i.e., the discretionary exercise of government authority) and monetary transactions and entitlements.

An inherently governmental function involves, among other things, the interpretation and execution of the laws of the United States. Inherently governmental functions do not normally include gathering information for or providing advice, opinions, recommendations, or ideas to government officials. They also do not include functions that are primarily ministerial and internal in nature, such as building security, mail operations, operation of cafeterias, housekeeping, facilities operations and maintenance, warehouse operations, motor vehicle fleet management operations, or other routine electrical or mechanical services.

## 1.2 Operational Architecture View

The Operational Architecture view in Section J, Attachment J-7, Operational Architecture Visio, provides only the hierarchy of functions that FirstNet may execute in order to ensure the success of the NPSBN. These functions do not represent the entirety of functions that will comprise the NPSBN, only those that FirstNet believes it may execute over the course of the NPSBN contract lifecycle. Additional functions may be identified and executed based on proposed solutions to the objectives identified in Section C, Statement of Objectives. FirstNet’s final Operational Architecture is dependent upon the nature and scope of the final award resulting from this Request for Proposal. Offerors should note that these functions do not depict any set of prescriptive requirements and are strictly conceptual in nature.

## 1.3 Operational Architecture – FirstNet Functions

### A.0 FirstNet Implementation and Oversight of the Act

Implements and oversees the Middle Class Tax Relief and Job Creation Act of 2012 (the Act) that created FirstNet as an independent authority within the National Telecommunications and Information Administration (NTIA) to provide first responders with the first nationwide, high-speed, broadband network dedicated to public safety.

---

## **A.1 FirstNet Governance, Program Management, and Execution**

Establishes FirstNet strategy and organizational processes, procedures, and policies, including program management of Contractor’s activities.

### **A.1.1 Organizational and Program Management**

Manages strategy implementation and program execution.

#### **A.1.1.1 Strategy Development**

Sets FirstNet’s strategic direction, including the facilitation of strategy execution, assessment of program progress, and adherence to strategic milestones.

#### **A.1.1.2 Strategic Planning**

Conducts FirstNet strategic planning.

### **A.1.2 Industry Relations Communications and Outreach**

Manages communications and outreach to industries associated with FirstNet, including suppliers, and communicates changing technologies and market demands internally.

#### **A.1.2.1 Public Safety Associations Outreach**

Manages communications and outreach to public safety associations.

#### **A.1.2.2 Industry Associations Outreach**

Manages communications and outreach to industry associations.

#### **A.1.2.3 Vendors and Suppliers Outreach**

Manages communications and outreach to vendors and suppliers to ensure FirstNet-required features and functionalities are represented in roadmaps and rollout schedules.

### **A.1.3 Legal Affairs**

Ensures compliance with the Act and any other applicable laws.

#### **A.1.3.1 Environmental Compliance**

Ensures compliance with environmental laws and regulations, including the National Environmental Policy Act.

#### **A.1.3.2 Spectrum Management**

Supports FirstNet spectrum management, interference mitigation, and clearing activities, including Federal Communications Commission (FCC) licensing, FCC and NTIA reporting requirements, 3rd Generation Partnership Project (3GPP) standards body interface support, and interface with all other domestic and international standards bodies impacting FirstNet’s spectrum position.

---

### A.1.3.3 Interagency Agreements

Develops interagency agreements and monitors compliance with them.

### A.1.3.4 Contractor's Regulatory Filings

Reviews and approves Contractor-submitted regulatory filings needed to roll out the NPSBN.

### A.1.3.5 Contractor's Economic Desirability Analysis

Reviews and approves the Contractor's economic desirability analysis, which informs the rollout of the NPSBN.

### A.1.3.6 Contractor's Legal Compliance

Monitors the Contractor's compliance with all rules, regulations, and laws impacting the rollout of the NPSBN.

## A.1.4 Technical Certification Oversight

Oversees the certification and compliance process applicable to the NPSBN.

## A.1.5 Acquisition Management

Responsible for managing the acquisition process and for identifying new acquisition opportunities to enhance public safety NPSBN services.

### A.1.5.1 Contract Administration

Administers all contracts, including packaging and preparation for release, signatures, and additions/addendums.

#### A.1.5.1.1 Contract Life-Cycle Management

Manages the life-cycle of all contracts, including renewals, change of scope, and conversions to new contracts.

#### A.1.5.1.2 Contract Change Management

Manages all contract changes, including redlines, agreements, addendums, and version control through finalization.

## A.1.6 Stakeholder Communications

Responsible for communications, outreach, and engagement with FirstNet's stakeholders, including sharing relevant information to assist in understanding the evolving needs of public safety.

### A.1.6.1 Government Affairs

Manages outreach and communications with local, state, and federal officials regarding FirstNet.

---

#### A.1.6.1.1 Congressional Outreach

Manages outreach and communications with members of Congress, congressional committees, and staff.

#### A.1.6.1.2 Federal/Congressional Outreach Planning

Develops and implements a federal outreach plan, including congressional outreach.

#### A.1.6.1.3 Congressional Committees Outreach

Manages outreach and communications with the relevant congressional committee members and staff.

#### A.1.6.1.4 Federal Messaging

Develops and coordinates messages and communications across the federal government.

#### A.1.6.1.5 Congressional Testimony

Develops and presents testimony at congressional hearings.

#### A.1.6.1.6 State Outreach

Manages outreach and communications with state executive and legislative staff.

#### A.1.6.1.7 Local Outreach

Manages outreach and communications with city and county officials, including county governments, city mayors, town councils, and other local government entities.

#### A.1.6.2 Public Affairs Communications

Represents FirstNet's interests with local, state, and federal government constituents through proactive outreach and communication, including issuing alerts regarding network problems and failures if and when they occur.

#### A.1.6.3 Public Safety Advisory Committee Support

Manages meeting planning and administrative services for the Public Safety Advisory Committee, its subcommittees, and associated working groups.

#### A.1.6.4 Branding

Reviews and approves the brand strategy encompassing network services, evolving applications, and unfolding technologies, including communications methods and materials.

#### A.1.6.5 Events Management

Coordinates state, tribal, federal, and association conferences, meetings, and events, including in-person events, webinars, and telephone and video conferencing.

---

## A.1.7 Outreach and Oversight of States that Assume Responsibility for Deploying the Radio Access Network

Manages outreach and communications with states and territories that assume responsibility for deploying their own Radio Access Network (RAN) to ensure alignment with evolving network and operational compliance requirements and to solicit inputs on evolving public safety needs.

### A.1.7.1 Legal Compliance for States that Assume Responsibility for Deploying the RAN

Monitors efforts by states and territories that assume responsibility for deploying their own RAN, ensuring compliance with all rules, regulations, and laws applicable to FirstNet.

### A.1.7.2 Spectrum Management Lease Agreements with States that Assume Responsibility for Deploying the RAN

Supports Spectrum Management Lease Agreements negotiations and agreements with states or territories that assume responsibility for deploying their own RAN and monitors compliance with them.

## A.1.8 Financial Oversight

Responsible for financial management of the organization, which incorporates periodic reviews of the Contractor's income and financial statements and includes setting financial plans, monitoring and evaluating the implementation of these plans, and revising them as needed.

### A.1.8.1 Cost Assurance

Provides analyses of current and future project costs to ascertain the overall sustainability of the network.

### A.1.8.2 Revenue Assurance

Establishes and implements a revenue assurance function for auditing and monitoring receivables, collections, and bad debt from all revenue sources.

### A.1.8.3 Customer Analytics

Analyzes customer behavior using market segmentation and predictive analyses, among other methods, to inform key business decisions.

### A.1.8.4 End-User Fee Monitoring

Monitors recurring end-user fees regarding their impact to achievement of public safety device connection targets.

### A.1.8.5 User Fee Approvals

Seeks NTIA's approval for NPSBN network user fees, network capacity lease fees, and network equipment and infrastructure lease fees.

---

### **A.1.9 Covered Leasing Agreements**

Responsible for creating the framework for the secondary use of Band 14, negotiating Covered Leasing Agreements with the Contractor and other stakeholders, and monitoring the agreements.

### **A.1.10 Compliance Auditing**

Supports financial, management, and programmatic auditing functions to ensure compliance with all contractual terms and conditions.

#### **A.1.10.1 Revenue Assurance Auditing**

Audits and monitors the Contractor's receivables, collections, and bad debt to ensure compliance with all contractual terms and conditions.

#### **A.1.10.2 Processes and Procedures Auditing**

Audits the Contractor's and third-party contractor's services and operations processes and procedures to ensure compliance with all contractual terms and conditions.

#### **A.1.10.3 Security Auditing**

Audits all security processes and procedures, including support of third-party contractors retained or working on behalf of FirstNet to ensure compliance with all contractual terms and conditions.

#### **A.1.10.4 Training on FirstNet Processes and Procedures**

Trains the Contractor on FirstNet processes and procedures.

### **A.1.11 Quality Assurance and Performance Management**

Oversees auditing of the Contractor's Quality Assurance and Surveillance Plan (QASP) to compliance with all contractual terms and conditions. As the QASP evolves over time, the function owner will provide input for metrics and acceptance criteria needed to meet the NPSBN stated objectives.

#### **A.1.11.1 Contract Compliance**

Develops, adjusts, and oversees NPSBN contracts to ensure compliance with all contractual terms and conditions by the Contractor and states and territories that assume responsibility for deploying their RAN.

#### **A.1.11.2 Key Performance Indicator Compliance and Oversight**

Defines, adjusts, and audits NPSBN Key Performance Indicators, providing oversight to compliance with all contractual terms and conditions.

#### **A.1.11.3 Oversight of Contractor's NPSBN Performance Monitoring**

Monitors the overall performance of the NPSBN. Oversees the timely and appropriate resolution of identified performance issues by the Contractor and states and territories that assume responsibility for deploying their RAN.

#### A.1.11.3.1 Performance Analytics Oversight

Oversees analytics of the NPSBN to identify issues and trends. Works with the Contractor and program management on mitigation.

#### A.1.11.4 Performance Monitoring of Systems Engineering Life-Cycle

Conducts performance monitoring and oversight of the Contractor's systems engineering life-cycle processes and outcomes for the NPSBN.

##### A.1.11.4.1 Systems Architecture Life-Cycle Oversight

Oversees the Contractor's system architecture life-cycle processes and outcomes for the NPSBN.

##### A.1.11.4.2 Systems Design and Development

Oversees the Contractor's performance of the systems design and development for the NPSBN within the service development life-cycle.

##### A.1.11.4.3 Systems Integration Oversight

Oversees NPSBN systems integration within the integration activity life-cycle.

##### A.1.11.4.4 Testing and Evaluation Oversight

Oversees the Contractor's testing and evaluation of the NPSBN.

##### A.1.11.4.5 Oversight of Transition to Operations and Maintenance

Oversees the Contractor's transition to operations and continuing maintenance of the NPSBN.

##### A.1.11.4.6 Systems Engineering Life-Cycle Assessment

Oversees and assesses the Contractor's systems engineering life-cycle processes for the NPSBN.

##### A.1.11.4.7 Oversight of Systems Engineering Policies and Procedures

Oversees systems engineering policies and procedures within the NPSBN to enforce compliance of the engineering life-cycle and evolution of the NPSBN.

##### A.1.11.4.8 Supply Chain Management Oversight

Oversees all supply chain issues relating to systems engineering life-cycle activities.

#### A.1.12 Change Management

Reviews, negotiates, and approves Contractor-proposed changes related to technical, financial, or organizational aspects of the NPSBN.

#### A.1.12.1 Organizational Structure Management

Manages the overall organizational structure to execute the NPSBN in the most efficient manner. Conducts discussions and negotiations with Contractor for required organizational changes in support of change management.

#### A.1.12.2 Resource Management Oversight

Conducts discussions and negotiations with the Contractor for resource requirement changes in support of change management.

#### A.1.12.3 Change Work Order Management

Conducts discussions and negotiations with the Contractor for work order changes in support of the expedient execution of the program.

### A.1.13 Oversight and Evolution of Network Guidelines

Defines a framework for the high-level network strategy and designs guidelines to ensure optimum network performance for public safety and a ubiquitous experience for FirstNet stakeholders, including the Contractor, states and territories that assume responsibility for deploying their RAN, and FirstNet.

#### A.1.13.1 Oversight of Network Identifiers Policies

Creates the framework and policies for network identifiers to be used by FirstNet, the Contractor and states and territories that assume responsibility for deploying their RAN to ensure nationwide public safety interoperability and interworking.

##### A.1.13.1.1 Standard Definitions for Static QPP, Dynamic QPP, and User Subscription Profiles

Develops the user policy for the Quality of Service, Priority, and Preemption (QPP) framework specifically for static (non-emergency), dynamic (emergency), and user subscription profiles (i.e., voice, data, and push-to-talk).

###### A.1.13.1.1.1 Static QPP Profile Approval

Approves static QPP profiles for appropriate NPSBN services.

###### A.1.13.1.1.2 User Subscription Profile Definition

Defines all user subscription profiles for NPSBN services such as voice, data, and push-to-talk.

###### A.1.13.1.1.3 Dynamic QPP Profile Definition

Develops the dynamic QPP profile framework specifically for dynamic, emergency situations.

###### A.1.13.1.2 Identity Trustmarks Management

Identifies trustmarks, including specific identity-related functionalities, which should be supported as part of the FirstNet federated Identity, Credential, and Access Management (ICAM). Identifies specific trustmarks that are recommended to be supported across agencies in order to more easily achieve

---

secure access and interoperability (i.e., federated ICAM). Oversees security for the trustmarks to ensure adequate standards are being applied.

#### A.1.13.1.3 Trustmarks Approval

Creates, updates, and manages vetting of trustmarks that are recommended to be included in the FirstNet federated ICAM.

#### A.1.13.1.4 Global Access Policies

Defines and provides support of global access policies for the establishment of global identity management.

#### A.1.13.2 Spectrum Management and Usage Oversight

Creates and monitors the Band 14 spectrum management framework with respect to FirstNet, the Contractor, and states and territories that assume responsibility for deploying their RAN. Monitors and reports Band 14 incumbent transmission transition schedules (to leave/evacuate Band 14 spectrum) and temporary licensees utilizing Band 14.

#### A.1.13.3 Network Design Objectives Oversight

Defines a framework for network design guidelines to ensure optimum network performance for public safety and a ubiquitous network experience for FirstNet stakeholders, including the Contractor, states and territories that assume responsibility for deploying their RAN, and FirstNet.

##### A.1.13.3.1 Oversight of Radio Access Network Border Design

Ensures optimal network design and integration of FirstNet cell sites at the border with states and territories that assume responsibility for deploying their RAN and other service providers, thus providing optimum network performance for public safety and a ubiquitous network experience for FirstNet stakeholders, including the Contractor, states and territories that assume responsibility for deploying their RAN, and FirstNet.

#### A.1.14 Roaming Oversight and Approval

Identifies and develops roaming requirements with the Contractor. Oversees the timely implementation of roaming agreements.

#### A.1.15 Use Case Development and Oversight

Defines possible use cases for the NPSBN, driving requirements for product management and network design guidelines.

##### A.1.15.1 Public Safety Use Case Development

Defines public safety use cases, which may drive requirements and design guidelines.

### A.1.15.2 Secondary Users via Covered Leasing Agreements Use Case Approval

Defines secondary user use cases via Covered Leasing Agreements associated with the NPSBN, which may drive requirements and design guidelines.

### A.1.16 Program Management Oversight

Directly manages the FirstNet program staff, both federal and Contractor, utilizing known and accepted program management methods (e.g., Project Management Institute, Agile) to manage the outcomes and performance of the program.

#### A.1.16.1 Program Impact Management

Assesses program impacts and identifies potential strategies or solutions to mitigate or reduce impacts to the program.

##### A.1.16.1.1 Schedule Management Oversight

Oversees the Contractor's management of all program schedules, including the definition, approval, and assignment of the program schedule. Schedule management includes tasks, priorities, assignments, dependencies, resources, timing and slippage, and critical path assessments.

##### A.1.16.1.2 Risk Management Oversight

Assesses program risks and identifies potential strategies or solutions to mitigate or reduce risks to the program.

##### A.1.16.1.3 Project Change Management

Manages all changes to the program. Management includes the definition, approval, and assignment of the change within the program. Changes range from technical to procedural and may include timing and resource requirements.

#### A.1.16.2 Program Communications Oversight

Manages the communications of all program statuses. Communications includes the reporting of milestone completions, resource utilization, and slippage and timing of deliverables to keep the project or program on track, including issue and roadblock resolution.

##### A.1.16.2.1 Oversight of Contractor's Program Status

Reports statuses for all Contractor projects and programs within FirstNet. Status management reporting includes the reporting of milestone completions, resource utilization, and slippage and timing of deliverables to keep the project or program on track, including issue and roadblock resolution.

##### A.1.16.2.2 Executive and Board Reporting

Responsible for the creation, delivery, and presentation of executive summary reports of all project information, statuses, and progress reports to the FirstNet Board and executive team.

---

### **A.1.17 Sales Management Oversight and Performance Monitoring**

Tracks the overall progress of sales and related activities for devices and services. Works with the Contractor to ensure sales meet or exceed targets and, if necessary, to agree on mitigation plans.

#### **A.1.17.1 Account Planning Compliance**

Monitors account planning strategy for compliance regarding sales and ongoing account management functions.

#### **A.1.17.2 Priority Elements of Sales Strategy Identification**

Identifies strategic priorities to implement the sales plans for all segments of customers and monitors the performance of sales plans.

#### **A.1.17.3 Sales Strategy Approval**

Approves the strategic framework for the successful implementation of the sales plans for all segments of customers and monitors its performance.

#### **A.1.17.4 Sales Targets and Performance Monitoring**

Develops short- and long-term sales targets and adjusts according to changing market trends and dynamics. Measures target performance achievements.

#### **A.1.17.5 Sales Monitoring and Compliance**

Develops a standard sales performance monitoring framework and ensures the timely distribution and review of sales reports.

#### **A.1.17.6 Special Offers Approval**

Reviews and approves special products, services, and pricing offers.

#### **A.1.17.7 Pricing Strategy Agreement**

Negotiates and achieves agreement with the Contractor on pricing strategies for services, features, and devices based on FirstNet's recommended pricing strategy.

#### **A.1.17.8 User Purchasing Process Approval**

Approves user purchasing processes for individually liable accounts.

### **A.1.18 Oversight of Contractor's Performance Related to Providing Customer Care**

Oversees and monitors the Contractor's performance related to providing customer care for the NPSBN.

#### **A.1.18.1 Resolution of Issues**

Coordinates with the Contractor to collect input and needs from FirstNet stakeholders to assist in the evolution of user and technical issues.

---

## A.1.19 Technical Oversight and Project Management

Oversees the Contractor's work as it relates to all technical project management aspects of the NPSBN.

### A.1.19.1 Network Solutions End-to-End Architecture Oversight

Oversees the development of the overall end-to-end architecture of the NPSBN within each life-cycle integration.

#### A.1.19.1.1 Technical Project Management

Oversees the technical project management for systems engineering activities related to developing, implementing, and operating the NPSBN, as well as delivering services and managing the evolution of technologies.

##### A.1.19.1.1.1 Technical Schedule and Risk Management

Oversees the Contractor's technical schedule and risk management for systems engineering activities related to developing, implementing, and operating the NPSBN, as well as delivering services and managing the evolution of technologies.

##### A.1.19.1.1.2 Engineering and Integration Risk Management

Oversees the Contractor's performance of engineering and integration risk management for systems engineering activities related to developing, implementing, and operating the NPSBN, as well as delivering services and managing the evolution of technologies.

##### A.1.19.1.2 Public Safety Quality Assurance Testing at the FirstNet Laboratory

Creates and executes FirstNet's quality assurance test plans and test cases to verify the quality and functionality of public safety features. Performs cybersecurity quality assurance testing to verify that security features do not negatively impact functionality for end users. Oversees the Contractor's FirstNet acceptance test execution of public safety features. Oversees the Contractor's FirstNet cybersecurity acceptance testing to verify that security features do not negatively impact functionality for end users.

##### A.1.19.1.3 FirstNet Laboratory Facility Management

Manages and maintains the FirstNet laboratory facility space; power; heating, ventilation, and air conditioning (HVAC); battery backup; backup generators; external Internet Protocol (IP) connectivity; test bench furniture; standard test equipment; applicable software licenses; and end-user test devices.

##### A.1.19.1.4 Experience Center Facility Management

Manages and maintains the Experience Center space, power, HVAC, IP connectivity, furniture, applicable software licenses, and end-user test devices.

### A.1.19.2 Technical Operations Life-Cycle Oversight

Oversees technical operations and practices within the NPSBN.

---

#### A.1.19.2.1 Systems Engineering Oversight

Oversees the systems engineering architecture, design, integration, and evolution of the NPSBN.

#### A.1.19.2.2 Oversight of Technology Implementation

Provides oversight of technology implementation operations and practices of the NPSBN.

#### A.1.19.2.3 Technology Risk Management Oversight

Oversees operations and practices related to technology risk management for the NPSBN.

#### A.1.19.2.4 Technology Change Management Oversight

Oversees operations and practices related to technology change management for the NPSBN.

#### A.1.19.2.5 Technology Configuration Management Oversight

Oversees operations and practices related to technology configuration management for the NPSBN.

#### A.1.19.2.6 Technology Refresh Oversight

Oversees technology evolution planning and implementation within the NPSBN.

#### A.1.19.2.7 Technical Review Gates

Manages all approval gates within the systems engineering life-cycle.

#### A.1.19.2.8 Technical Compliance Oversight for States that Assume Responsibility for Deploying the RAN

Oversees compliance of states and territories that assume responsibility for deploying their RAN with FirstNet technical policies, procedures, and architecture.

#### A.1.19.2.9 Provisioning Policy and Procedure Compliance

Monitors, enforces, and provides feedback on the provisioning policies and procedures implemented by the Contractor.

#### A.1.19.2.10 Operational Procedure Compliance

Monitors, enforces, and provides feedback to support the improvement of network operational procedures.

#### A.1.19.3 Technical Strategy Approval

Approves short- and long-range technical roadmaps and strategies for the NPSBN.

### A.1.19.3.1 Concept Development

Provides concept development of the services and technical functionalities needed to meet public safety requirements.

#### A.1.19.3.1.1 Proof-of-Concept and Field Testing Participation and Approval

Tests future prototypes, including features, cybersecurity, and functionality. Ensures prototypes align with industry developments and standards and their applicability to the public safety marketplace.

### A.1.19.3.2 Roadmap Development

Oversees the development of NPSBN technical roadmaps.

#### A.1.19.3.2.1 Public Safety Product and Feature Roadmap Approval

Approves NPSBN portfolio roadmaps to optimize the supply of products, features, and functionality to meet the evolving needs of the public safety community.

#### A.1.19.3.2.2 Near-Term Public Safety Product Roadmap Approval

Approves the Contractor's near-term public safety product roadmap based on input from FirstNet and the public safety community.

#### A.1.19.3.2.3 Outreach Feedback for Long-Term Services

Gathers feedback and requirements from the public safety community regarding outreach about the development of public safety product roadmaps that focus on three years and beyond.

#### A.1.19.3.2.4 Long-Term Features and Services Development

Identifies system features and services in support of the long-term public safety product roadmap.

#### A.1.19.3.2.5 Features and Services Integration into Long-Term NPSBN Roadmap

Provides a pre-decisional position on the integration of features and services into the long-term NPSBN roadmap.

#### A.1.19.3.2.6 Device Portfolio Strategy Approval

Defines the range of device/accessory types and pricing to cover all public safety service requirements.

#### A.1.19.3.2.7 Public Safety Standards Roadmap Development

Drives standards organizations to implement the FirstNet long-term roadmap.

##### A.1.19.3.2.7.1 Global and U.S. Standards Strategy Approval

Approves the Contractor's strategy and tactics for ensuring FirstNet's feature requirements are supported by applicable global and national standards and contained in the Contractor's standards releases.

#### A.1.19.3.2.7.2 Tactical Participation in Global and U.S. Standards

Interfaces and coordinates with the Contractor to ensure FirstNet’s feature requirements and items are supported by global and national standards bodies and included in the Contractor’s standards releases.

#### A.1.19.3.3 Requirements Engineering Oversight

Collates product requirements to develop engineering guidelines and system requirements.

#### A.1.19.4 Disaster Response and Major Event Support

Oversees the Contractor’s disaster response planning, training, and support of major events and disaster scenarios, driving continuous improvement.

#### A.1.19.4.1 Agency Support for NPSBN Mitigation Plan Development

Provides local, state, tribal, and/or federal agencies with mitigation planning support for disasters and major events, including conducting training exercises with constituents.

#### A.1.19.5 State Plans Oversight

Oversees the development and presentation of state plans.

#### A.1.19.5.1 Public Safety Stakeholder Data Collection and Analysis

Defines, collects, and analyzes state data elements—such as coverage objectives, users and operational areas, capacity planning, and training needs—for incorporation into state plans.

#### A.1.19.5.2 State Plan Change Management

Coordinates stakeholder inputs, requests, and engagements relative to changes in the state plans.

#### A.1.19.5.3 Delivery of State Plans to Governors

Consolidates state consultation/outreach data with Contractor-provided support products into a final state plan for signature by the governor of each of the 56 states and territories.

### A.1.20 End-to-End Security Oversight

Oversees the development of an end-to-end network security policy, process, and procedures framework that aligns with evolving standards and prevailing conditions to meet the end-to-end security requirements outlined in Section J, Attachment J-3, FCC TAB RMTR, and Section J, Attachment J-10, Cybersecurity, as well as Section C, Statement of Objectives.

#### A.1.20.1 Federal Security Monitoring

Oversees the monitoring of the security posture of the NPSBN for any incidents, detected by the Contractor, that may negatively affect the confidentiality, integrity, or availability of network devices, end-user devices, and systems.

#### A.1.20.1.1 Cyber Incident Response Oversight

Oversees incident response to NPSBN system and user incidents and ensures the Contractor provides timely and accurate reporting, as required, as well as any required external reporting.

#### A.1.20.1.2 Vulnerability Management Oversight

Oversees the methodology of the Contractor to conduct and maintain routine, consistent vulnerability scanning of the NPSBN infrastructure that is passive to ensure no impact to systems. Oversees the management of efficient, effective remediation of any discovered vulnerabilities, which may include continuously applying software updates and patches to systems and equipment that reside on the NPSBN.

#### A.1.20.1.3 Cyber Defense Monitoring

Oversees the methodology of the Contractor to develop and deploy a defensive architecture to proactively monitor the NPSBN systems for indications of malicious activity—both internal and external. The architecture should include in-depth defense tactics and varied technologies, such as intrusion detection systems, intrusion prevention systems, net flow capture, and packet capture.

#### A.1.20.1.4 Policy Development and Monitoring

Develops security policies in collaboration with the public safety community and federal agencies. Provides governance and guidance on managing NPSBN cybersecurity risks. Oversees the Contractor's program to ensure end users' compliance with security policies and procedures, including security training.

#### A.1.20.1.5 Support for Disasters and Major Events

Provides support for disaster response and recovery and major events, including physical assets, human resources, advance planning, and execution protocols to enable rapid response. Provide cybersecurity support during disasters and major events, as necessary, to ensure they do not become a point of weakness in the network.

#### A.1.20.1.6 Cybersecurity Intelligence and Threat Analysis

Oversees the Contractor's cybersecurity intelligence and threat analysis processes and procedures, ensuring the implementation of cybersecurity functions in security systems based on the collection, analysis, and reporting of cybersecurity threat data and malicious activity in order to mitigate potential security breaches.