Today’s Objectives

• Provide an overview of the NPSBN and the Governor’s upcoming Opt-In/Out process
• Describe DHSES activities and involvement in the program
• Learn about FirstNet’s offered State Plan for NYS (i.e., the “Opt-In” option)
• Explain NYS’s State Plan evaluation process
• Provide a forum for stakeholder Q&A
9/11 Commission Recommends improved communications for public safety and first responders

Department of Commerce establishes FirstNet Board

FirstNet Initial Consultation Meeting

FirstNet awards NPSBN

Middle Class Tax Relief and Job Creation Act of 2012
- Establishes Technical Advisory Board
- Authorized the NTIA to establish the NPSBN based on a single, national network architecture
- Reallocated 700 MHz D Block spectrum to public safety
- Authorized funding through spectrum auctions
- The Act mandates that each Governor designate a Single Point of Contact (SPOC) for communication with FirstNet; Deputy Commissioner Kevin Wisely is NY’s
What is the First Responder Network Authority?

**Organization**
- FirstNet is an independent authority authorized by Congress

**Mission**
- Based on 9/11 Commission Report recommendations, FirstNet will ensure the building, deployment, and operation of the nationwide public safety broadband network

**Funding and Assets**
- FirstNet will spend up to $7B to deploy a nationwide Public Safety mobile broadband network
- FirstNet brings 20 MHz of Band 14 spectrum to enable a Public-Private Partnership

**Governance**
- 15 member Board, CEO, President and management team
- Mandate to coordinate with the 50 states, 5 territories, and Washington, D. C.
- Advised by Public Safety Advisory Committee (PSAC), a 40-member committee
FirstNet’s Singular Focus

“The First Responder Network Authority shall hold the single public safety wireless license and take all actions necessary to ensure the building, deployment, and operation of the nationwide public safety broadband network”
What is public safety broadband?

- An LTE mobile data network for the express use of Public Safety
- Complementing LMR with LTE
FirstNet will NOT replace LMR

The network is expected to initially transmit data, video, and other high-speed features, such as location information and streaming video, as well as non-mission critical voice.

Source: First Responder Network Authority
The Radio Access Network (RAN)

Consists of all infrastructure that connects to user devices:

- radio base stations
- cell towers
- DAS (distributed antenna systems)
- other wireless infrastructure
- backhaul to the core network

During consultation, FirstNet has been charged to determine the coverage expectations and priorities that must be included in the RAN deployment plan to enable public safety to meet its mission, no matter where it takes them.

Source: First Responder Network Authority
8/20/2017
Challenges: Coverage and Capacity

- Provide coverage to public safety in every state and territory
- The network should be designed to public safety-grade standards
- FirstNet must build and operate the core network

Note: Map based on existing composite commercial coverage (2015)
Challenge: Capital and Cost

- Cell site capital investments
- Site operating costs
- Hardening investment
- Limited number of public safety users
- City, county, state, tribal and federal constraints

Source: First Responder Network Authority
Challenge: Unique Coverage Requirements

New York has Unique Geography and Demographics that will Require Multiple Solutions with Seamless Operation

- Rural
- Suburban
- Urban
- Dense Urban
Band 14 spectrum: What’s the benefit?

**Priority & Preemption**
- The Act requires that First Responders have priority access to Band 14, assuring network access when commercial networks are overloaded

**Spectrum Monetization**
- The Act also allows for Band 14 spectrum, *when not in use by FRs*, to be monetized to help fund the NPSBN’s initial build & operation
- How this monetization is to be implemented has been left open to creative solutions
Network Components and Responsibilities

Source: First Responder Network Authority

Governor’s Decision

Agency Decision
RFP Highlights

• Objectives-based RFP (sixteen)
• RFP Evaluation Factors:
  – Business Management
  – Coverage and Capacity
  – Products and Architecture
  – Value Proposition Assessment
  – Past Performance Factor

…listed in order of importance
RFP Statement of Objectives

- Building, Deployment, Operation & Maintenance of the NPSBN
- Financial Sustainability
- First Responder User Adoption
- Device Ecosystem
- Applications Ecosystem
- Accelerated Speed to Market
- User Service Availability
- Service Capacity
- Cyber Security
- Priority Services
- Integration Of Opt-out State 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 & Other Laws
FirstNet’s Award:

Contract signed with AT&T March 2017
NPSBN Milestones - FirstNet State Plans Timeline

- **Initial State Plan Released**: 2017
- **Initial State Plans Reviewed by States**: 2017
- **Final State Plans Released**: 2017
- **FirstNet Reviews Comments**:
- **State Plan Delivery to Governor (90 Day Review)**: 2017
- **Opt Decision Deadline**: 2018
- **Network Implementation complete**: 2022

8/20/2017
Initial State Plan

- FirstNet/AT&T delivered the Initial State Plan June 19th
- NYS Comments submitted on August 4th
- FirstNet/AT&T will use comments to revise & create Final State Plan
Governor’s Opt-In/Out Decision

- **Opt-In**: FirstNet/Partner implement the State Plan
  - AT&T and FirstNet construct and maintain Network at no cost to State (subscription services costs responsibility of user)
- “Do nothing”: Same result as Opt-In
- **Opt-Out**: State chooses to build their own mobile data network, integrate with the larger NPSBN
State Plan - a 40,000’ View

- FirstNet selected AT&T as their NPSBN partner
  - 25-year contract/commitment
  - AT&T will build and manage the NPSBN Core
  - AT&T will deliver individual State Plans for each state (State Plan is RAN-focused)
- States to review and request revisions to Initial State Plan (underway)
- Final State Plan: NYS must decide to
  - Opt-In (accept the AT&T-proposed RAN), or
  - Opt-Out (pursue its own RAN, attach to AT&T/FirstNet Core)
State Consultation

• Purpose
  – NYS Input to FirstNet Procurement

• NYS Approach
  – SPOC to lead (Single Point of Contact)
  – Create Public Safety Broadband Working Group

• Federally Funded - State and Local Implementation Grant Program
Overview of the Consultation Process

- Consultation is an iterative process, not a single event
- FirstNet will communicate the consultation process and necessary roles and responsibilities
- Consultation will focus on critical information and data
- Plan development will be iterative
- Consultation culminates with the creation of the state plan

Source: First Responder Network Authority
PSBBWG

- NYS Public Safety Broadband Working Group (PSBBWG)
- Formed in March 2015 by DHSES/OIEC
- 40 members representing diversity of public safety stakeholder agencies
- Meet as-needed (discussion, input, dissemination of data)
- Weigh in on NPSBN items of importance
2015 Data Submittal

- FirstNet-requested Stakeholder Needs
- DHSES survey of county-level data
- Submitted in Sept 2015
- Data provided to bidders during RFP
FirstNet Data Collection Elements

Operational Areas

Ex. Law Enforcement Personnel counts vs. jurisdiction

- Illustrates potential # of assigned users, primary areas of operations
- Similar data to be provided for Fire, EMS
FirstNet Data Collection Elements
Application Importance

- Internet browser access
- Text messaging, paging, one way notifications
- Field Based Reporting
- Computer Aided Dispatch (CAD) Interface
- Database inquiries (NCIC, criminal history, hot files)
- Records Management Systems (local queries)
- Intranet access/VPN to home network
- Automatic Vehicle Location
- Small File (under 1MB) transfers
- Geospatial (GIS) Applications
- Large file (over 1MB) transfers
- Transmission of high quality video
- Transmission of low quality video
- Telemetry (continuous process status monitoring)

Legend:
- Currently Used
- High Future Value
- Moderate Future Value
- Low Future Value
- No Future Value
- No Response
FirstNet Data Collection Elements
Application Use (All Disciplines)

- Communications (texting, paging, etc.)
- Intranet Access/Mobile VPN solution
- General connectivity (email, internet, file transfers)
- Field Based Reporting
- Computer Aided Dispatch (CAD)
- Location Services (Mapping, routing)
- Automatic Vehicle Location (AVL)
- Database Inquiries
- Video
- Telemetry

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Daily  Not Used but Desired  Not Used

8/20/2017
FirstNet Data Collection Elements
Current Service: Cost

Device Type Qty & Monthly Service Fees
(Commercial Data Services)

- USB/Sidecar Modem/Aircard
- Jetpack/MIFI
- Vehicular Modem (w/ Wireless Modem /USB/Sidecar Modem)
- Tablet/Laptop
- Smart Phone
- Cell Phone

Device Qty in Survey Responses: X
Max Service Fee: X
Min Service Fee: X
Median Service Fee: X

8/20/2017
FirstNet Data Collection Elements
Current Service: Barriers

- Limited applications / Limited Needs
- Lack of coordination
- Lack of available expertise
- No barriers have been encountered
- Security
- Lack of availability or adequate coverage
- Reliability
- Fiscal/cost burden
FirstNet Data Collection Elements

Fixed Coverage Areas:

- NYS identified locations needing fixed coverage at completion (year 5)
- Deployable solutions assumed to be strategically placed

Note: Map based requirements document and is not a FirstNet coverage map.

8/20/2017
Other Consultation Task

• Outreach & Education
  – Website http://psbb.ny.gov
  – Periodic Newsletters
  – Regular updates at association meetings
  – Regional Meetings
NYS Evaluation Plan - Mission

• Represent NYS PS Stakeholders
• Comment on pros/cons, identify where improvement is needed, provide agency decision-makers comparative information
• Document unfulfilled requests in our report so they can be used for future network enhancement planning
• Provide “Opt-In/Out” evaluation to Governor
State Plan Evaluation Timeline

- **Comments Phase**
  - Release of Initial State Plans

- **Outreach**
  - FirstNet Reviews
  - NYS Comments

- **Regional Meetings**

- **Final State Plan Review**
  - Final State Plan Released

- **Opt Decision Deadline**
  - State Plan Delivery to Governor (90 Day Review)

Timeline:
- MAY: Comments Phase
- JUN: Outreach
- JUL: Regional Meetings
- AUG: Final State Plan Review
- SEP: Opt Decision Deadline
- OCT: Final State Plan Released
- NOV: State Plan Delivery to Governor
- DEC: Opt Decision Deadline
- JAN: Opt Decision Deadline

8/20/2017
NYS Evaluation Plan - Strategy

- 15 Topics of Interest (TOI) organized as “Super Groups”
- Each TOI group comprised of 6+/- SMEs

*During evaluation added 16th Topic: Governance & Policy*

|--------------------|------------------------|-------------------------------------------|---------------------|---------------------------|----------------------------|-------------------------------------------|---------------------------------------------|-------------------|--------------|
Evaluation Team Composition

- Subject Matter Expert (SME) Skills Survey – encouraged public safety and their SMEs to fill out
- Skill sets matched to 15 evaluation areas
- SME volunteer invitations sent
- Conflict of Interest, Non-Disclosure requirements for participation
State Plan Evaluation Progress

• TOI teams completed reviews
• Over 400 individual comments
• 89 aggregated comments submitted
• Expect further iteration with FirstNet prior to Final State Plan Delivery
Next Steps

• State Plan
  – Continued dialogue with FirstNet
  – Expect Final NYS Plan in late September
  – SPOC will review, provide evaluation to Gov.
  – Governor’s decision expected no later than late December
Useful Sites

• NYS PSBB website:
  http://psbb.ny.gov

• FirstNet’s website:
  http://firstnet.gov/

• FirstNet Marketing Portal:
  https://www.firstnet.com/