Initial Consultation Meeting with the State of Nevada

Working together to bring broadband to Public Safety in Nevada

January 7, 2015
Carson City, Nevada
Welcome & Introductions
Initial Consultation Objectives

- Strengthen our relationship with you
- Provide an update on FirstNet activities
- Hear from you about your unique needs and activities
- Discuss next steps
<table>
<thead>
<tr>
<th>Time</th>
<th>Agenda Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30</td>
<td>Welcoming Remarks</td>
</tr>
<tr>
<td>9:00</td>
<td>FirstNet Update &amp; Consultation Process</td>
</tr>
<tr>
<td></td>
<td>State Update</td>
</tr>
<tr>
<td>Noon</td>
<td>Lunch</td>
</tr>
<tr>
<td>1:00</td>
<td>User Discussion</td>
</tr>
<tr>
<td></td>
<td>Coverage Discussion</td>
</tr>
<tr>
<td></td>
<td>Outreach Discussion</td>
</tr>
<tr>
<td></td>
<td>Wrap-up &amp; Next Steps</td>
</tr>
<tr>
<td>4:30</td>
<td>Adjourn</td>
</tr>
</tbody>
</table>
Recommendation: Congress should support pending legislation which provides for the expedited and increased assignment of radio spectrum for public safety purposes....
Middle Class Tax Relief and Job Creation Act of 2012

“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”
First Responder Communications

The Current State

Non-Mission Critical

Mission Critical

Commercial LTE Service / Devices

Land Mobile Radio (LMR) for Public Safety

Data | Voice

Voice

January 7, 2015

Photo Source: http://a.abcnews.com/images/Entertainment/Burning_Man_Swar_16x9_992.jpg
FirstNet will provide emergency responders with the first nationwide, high-speed, wireless broadband network dedicated to public safety.

FirstNet LTE Service / Devices

Land Mobile Radio (LMR) for Public Safety

Data

Voice

Voice

Non-Mission Critical

The Near-Term Vision

Mission Critical

January 7, 2015

Photo Source: http://a.abcnews.com/images/Entertainment/Burning_Man_Swar_16x9_992.jpg
Leveraging an Evolving Landscape

Benefits of Leveraging Industry
• Existing Infrastructure
• Global Standard
• Economy of Scale
• Built & Maintained

Public Safety Requirements
• Dedicated Spectrum
• Hardened Infrastructure
• Specialized Devices
• Cyber-Security
• Public Safety Applications
As we begin the State consultation process, FirstNet is committed to:

• Maintaining a close working relationship

• Understanding unique needs

• Seeking input from all stakeholders

• Gathering and utilizing State data
Outreach and Communications

- FirstNet.gov website
  - Fact Sheets
  - Blogs
  - Presentations
  - Upcoming speaking engagements and current events
  - Board meeting materials and webcast

- Social media presence
  - Twitter (@FirstNetGov)
  - Google+ (+FirstNetGov)
  - YouTube (FirstNetGov)
  - Flickr (FirstNetGov)
  - LinkedIn
  - RSS Feeds
FIRSTNET UPDATES
FirstNet's Focus

Consultation Process

Acquisition / RFP Process

Support
Understanding Our Boundaries

- Legislation
- Funding
- Market Research
- Acquisition

Text = Public Safety Vision / Desire

January 7, 2015
# FirstNet Mandates Under the Act

*Understanding the Playing Field*

<table>
<thead>
<tr>
<th>Public Safety Entity (Eligible Users)</th>
<th>Management / Independent Authority</th>
<th>RFPs</th>
<th>Standards</th>
<th>Consultation</th>
<th>Secondary Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Architecture</td>
<td>Rural Coverage Consideration</td>
<td>Contracts</td>
<td>Commercial Infrastructure</td>
<td>Promote Equipment Competition</td>
<td>Opt-In</td>
</tr>
<tr>
<td>Roaming</td>
<td>PSAP</td>
<td>National Security Coverage Considerations</td>
<td>Cybersecurity</td>
<td>Public Infrastructure</td>
<td>Priority / Preemption</td>
</tr>
<tr>
<td>State Plan</td>
<td>Maintenance &amp; Upgrade</td>
<td>Certified Equipment List</td>
<td>PSAC</td>
<td>Training</td>
<td>Other(s) as Needed</td>
</tr>
</tbody>
</table>

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**Legislation**

17 January 2015

*Defining Responsibilities and Duties*
The network is to be self-sustaining. Planning and implementation funding is provided through spectrum auctions. Funds available until Sept 30, 2022; funds that have not been obligated revert to the Treasury.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Funds</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td>$135 Million</td>
<td>Grants to assist States/Territories with planning &amp; implementation</td>
</tr>
<tr>
<td>Implementation</td>
<td>$7 Billion</td>
<td>$2 Billion provided to start planning, designing and early implementation Remaining $5 Billion from spectrum auctions</td>
</tr>
</tbody>
</table>
| Growth / Sustainment| Ongoing | 1. Network User Fee (Service Plan)  
2. Lease Fee for Excess Network Capacity  
3. Core Network Access Fee  
4. Lease Fee for Network Equipment / Infrastructure |
• FirstNet is the license holder for Public Safety’s Broadband allocation – **Band Class (BC) 14**
• Commercial Carriers also operate in several bands outside of 700 MHz

<table>
<thead>
<tr>
<th>BC 17</th>
<th>BC 17</th>
<th>BC 14</th>
<th>LMR</th>
<th>BC 13</th>
<th>BC 14</th>
<th>LMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BC 12</td>
<td>BC 29</td>
<td>BC 12</td>
<td>BC 13</td>
<td>BC 14</td>
<td>LMR</td>
<td>BC 13</td>
</tr>
<tr>
<td>6 MHz</td>
<td>12 MHz</td>
<td>12 MHz</td>
<td>6 MHz</td>
<td>12 MHz</td>
<td>11 MHz</td>
<td>10 MHz</td>
</tr>
</tbody>
</table>

- **AT&T**
- **Dish**
- **T-Mobile**
- **US Cellular**
- **Verizon**

**January 7, 2015**
Revenue, Architecture & Priority

1. $7B Initial Funding from Auction Proceeds
2. Network User Fee (Service Plan)
3. Lease Fee for Excess Network Capacity
4. Core Network Access Fee
5. Lease Fee for Network Infrastructure

**Priority Access**

FirstNet Users

Commercial Customers of Secondary User

January 7, 2015
Multi-mode, multi-band devices

Satellite Overlay

Co-located Site

FirstNet RAN Only

Existing RAN Only

= FirstNet RAN (Band 14)

= Existing RAN (Band ??)

= Satellite Overlay
Market Research

Objective: Identify current market capabilities and best practices

• FirstNet has held meetings with vendors following a methodical and rigorous process

• FirstNet provides guidance on Doing Business with FirstNet website page
  – Note: FirstNet has temporarily suspended accepting new requests

January 7, 2015
Highlights:

- Comment Period: 9/24/14 – 10/27/14
- 63 responses received
- Allows inputs from broad stakeholder group
- Open & transparent process
- All responses posted on www.regulations.gov
• The Notice sought comment on key topics including:
  – Network elements, including “core” and “RAN”
  – Network users, including “public safety entity,” “secondary” and other network users
  – Permitted services
  – RFP standards for “open, transparent, competitive” process
  – Definition of “Rural” and substantial rural coverage milestones
  – Existing infrastructure sharing
  – Fees, including covered leasing fees

• FirstNet is considering comments for purposes of informing the RFP process, interpreting the Act, and establishing network policies
• FirstNet has made no final determinations on these topics at this time.
Request for Information (RFI)/Statement of Objectives (SOO)

Highlights:
- Comment Period: 9/24/14 – 10/27/14
- 122 responses received
- Does NOT dictate a specific solution
- Identifies objectives to encourage innovation
- Focuses on several key questions
- Informs the FirstNet RFP strategy & requirements
• The RFI asks respondents questions concerning:
  – Building, deploying, operating, and maintaining the nationwide public safety broadband network
  – End user pricing and financial sustainability
  – Speed to market
  – System hardening, reliability, and restoration
  – Priority and preemption
  – Opt-out Radio Access Network integration
  – Lifecycle innovation
  – Customer care and marketing
RFI Responses

• 2014 RFI Achievements
  – Broad participation from industry, government, and associations
  – Thoughtful answers to most questions and objectives
  – Largely validated our Statement Of Objectives

122 RFI Responses Received
Over 3000 pages of information to analyze
Consultation

Note: Tribal consultation requirements under the National Historic Preservation Act will be addressed separately.
Mandatory Elements for State Planning

• Construction of a Core and RAN build out
• Placement of towers
• Coverage areas of the network
• Adequacy of hardening, security, reliability, and resiliency requirements
• Assignment of priority to local users
• Assignment of priority and selection of secondary users
• Training needs of local users
Updated Consultation Approach

Preparation | Initial Consultation | RFP Evaluation Data Collection | Draft State Plan Review | Final State Plan Review | Phase 1 Implementation

FirstNet Acquisition
- RFI
- RFI/RFP Public Comments
- RFP Development
- RFP Evaluation
- RFP Results

Consultation
- Prep Workshops (OEC, Regional, State/Local)
- Users / Coverage / Outreach
- Review State Results & Priorities
- Draft Plan
- State Plan to Governor
- Network Implementation

Stakeholder Input
- PSAC / Stakeholder Inputs
- Operations
  (Provisioning, Training, Priority, Hardening, Security)
- Outreach / Education

January 7, 2015
State Plan Requirements

- Completion of the RFP process
- Document proposed build-out in the State
- Funding level for the State
Network Components and Choices

- **CORE**
  - Agency Choice
  - FirstNet

- **RAN**
  - FirstNet (Opt In)
  - State (Opt Out)

- **DEVICES / SERVICE**
  - Agency Choice

Responsibility:
- ✓ FirstNet
- ☐ FirstNet (Opt In)
- ☐ State (Opt Out)
- ☐ Agency Choice
FirstNet and Nevada are working together to bring wireless broadband to Public Safety