Transition 2016 (T16)
Agency Review Team (ART) Briefings

National Telecommunications and Information Administration
Overview and Meet-Greet

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<th>Before Meeting, Complete/Submit to Diane Marston (<a href="mailto:dmarston@doc.gov">dmarston@doc.gov</a>) with cc to Michelle McClelland (<a href="mailto:mmcclelland@doc.gov">mmcclelland@doc.gov</a>) and Brian DiGiacomo (<a href="mailto:bDiGiaco@doc.gov">bDiGiaco@doc.gov</a>)</th>
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National Telecommunications and Information Administration

Overview Presentation to the Department of Commerce Agency Review Team

December 7, 2016
NTIA

- Established in 1978 via Executive Order 12046.
- NTIA Organization Act (1992; 47 U.S.C § 901 et seq.)

Codifies NTIA “as the executive agency principally responsible for advising the President on telecommunications and information policies” and directs the agency to advance the following policies:

1. “Promoting the benefits of technological development in the United States for all users of telecommunications and information facilities.”
2. “Fostering national safety and security, economic prosperity, and the delivery of critical social services through telecommunications.”
3. “Facilitating and contributing to the full development of competition, efficiency, and the free flow of commerce in domestic and international telecommunications markets.”
4. “Fostering full and efficient use of telecommunications resources, including the effective use of radio spectrum by the Federal Government, in a manner which encourages the most beneficial uses thereof in the public interest.”
5. “Furthering scientific knowledge about telecommunications and information.”
NTIA Organization Act

Specific statutory functions in the NTIA Organization Act (47 U.S.C § 902) include, but not limited to:

- "to serve as the President's principal advisor on telecommunications policies pertaining to the Nation's economic and technological advancement and to the regulation of the telecommunications industry";

- Coordinate development of executive branch telecommunications policies and standards, "including (but not limited to) considerations of interoperability, privacy, security, spectrum use, and emergency readiness" and represent the executive branch position before the FCC;

- Establish policies and manage federal agency use of radio spectrum;

- In coordination with State Dept., developing and setting forth US positions on international telecommunications policy, including participation in international conferences and negotiations;

- In coordination with the FCC, developing plans "for improved management of all electromagnetic spectrum resources" and to conduct research in support of such efforts;

- To participate with NSC and OSTP with respect to emergency functions, the national communications system, and telecommunications planning functions.
NTIA Overview

NTIA is funded by both direct appropriations and other sources of funding.*

<table>
<thead>
<tr>
<th>Source</th>
<th>FY 2016</th>
<th>PB 2017</th>
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</thead>
<tbody>
<tr>
<td>Direct Appropriations</td>
<td>$39.5M</td>
<td>$50.8M</td>
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<tr>
<td>Reimbursables</td>
<td>$42M</td>
<td>$49M</td>
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<td>Mandatory Funding</td>
<td>$11.4M</td>
<td>$8.9M</td>
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FTE: DC ~ 260
     Boulder ~ 80

* Excludes FirstNet
Funding by Activity

NTIA receives direct appropriations for four general activities.

<table>
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<tr>
<th>Activity</th>
<th>FY 2016 Funding</th>
<th>FTE</th>
<th>PB FY 2017</th>
<th>FTE</th>
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<tbody>
<tr>
<td>Dom. &amp; Int'l Policy:</td>
<td>$9.1M</td>
<td>35</td>
<td>$15.8M</td>
<td>48</td>
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<td>Spectrum Management:¹</td>
<td>$8.5M</td>
<td>39</td>
<td>$8.9M</td>
<td>40</td>
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<td>Broadband Programs:</td>
<td>$11.8M</td>
<td>36</td>
<td>$12.9M</td>
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¹ Reimbursable match estimated at $35.6 million in FY 2017.
² Sponsored reimbursable projects estimated at $15 million in FY 2017.
Office of Policy Analysis and Development
Promotes Digital Economy Policies that Encourage Innovation, Competition, Jobs and Economic Growth

- FTE Ceiling: 19
- Supports the Assistant Secretary in his/her role as the President’s principal adviser on telecommunications and information policy, with a goal of fostering an open and stakeholder-driven environment that fosters innovation and economic growth
- Analyzes and develops policies on the range of issues critical to the digital economy, including cybersecurity, privacy, intellectual property, and the free flow of data, and uses multistakeholder processes as an alternative to traditional regulatory models to address these issues
- Represents the interests of the Department of Commerce and the online industry in a range of interagency dialogues on national and cybersecurity issues, and advocates for and coordinates positions across Federal agencies to ensure policies reflect the importance to the U.S. of innovation and growth in the digital economy
- Conducts research and publishes reports relating to use and adoption of the Internet
- Leads the Secretary’s Digital Economy Board of Advisors, comprised of 15 senior executives throughout the U.S. technology sector
Office of International Affairs

Formulates and promotes Internet, communications and information policies for presentation in multistakeholder, multilateral, bilateral and international organization settings

- FTE Ceiling: 14
- Formulates and coordinates telecommunication, Internet, and information policies and standards, including participation in domestic and international telecommunication conferences and negotiations, and supporting U.S. negotiators and interagency delegations in developing strategic proposals
- Preserves and protects the Internet's openness and economic potential by developing and establishing a broad range of Internet and digital economy policies
- Engages in international advocacy, utilizing bilateral, multilateral and multistakeholder processes to reach consensus on issues to encourage innovation and growth in the digital economy
- Serves as the executive secretariat for the Department's Internet Policy Task Force (IPTF), a cross-Department group that coordinates efforts in communications and information policy, economic analysis, intellectual property, trade, and technical standards to address the most pressing issues in the Internet and digital economy
- Serves as technical and policy expert to the Executive Branch and other stakeholders on issues relating to the Internet's domain name system management
Office of Telecommunications and Information Applications

Expanding and Promoting the Availability and Adoption of Broadband Service in the United States.

- FTE Ceiling: 30
- Administers grant programs that further the deployment and use of broadband in the U.S., laying the groundwork for sustainable economic growth; improved education, public safety, and health care; and the advancement of other national priorities (American Recovery and Reinvestment Act, 47 U.S.C. 1305)
- Coordinates activities across Federal agencies to encourage policies that promote broadband investment and adoption
- Provides telecommunications planning support to state and local governments through technical assistance, publications and tools, workshops and webinars
- Assists public and non-public entities in effectively using telecommunications and information technologies to better provide services and advance other national goals
Office of Spectrum Management

Meeting the increasing radio spectrum needs of the United States while balancing the national and economic security interests of our nation

- FTE Ceiling: 86
- Formulates and establishes plans and policies that ensure the effective and efficient use of scarce spectrum resources, domestically and internationally
- Develops long range spectrum plans to meet increasing public and private sector requirements, including those of wireless broadband services
- Assigns frequencies to the federal agencies to meet operational missions including emergency response; certifies spectrum availability for future government systems
- Leads efforts to coordinate spectrum and register Federal government satellite networks, domestically and internationally
- Leads federal efforts to prepare for, participate in, and implement the results of international radio conferences, and advises the State Department on issues pertaining to formal or cooperative arrangements with other countries
- Performs engineering and analysis to support spectrum policy, frequency coordination and interference resolution
Institute for Telecommunication Sciences
Delivering world-class technology through research and engineering services

- FTE Ceiling: 79
- Located in Boulder, Colorado, ITS has a 100-year history in spectrum science and engineering, including developing and maintaining standard radio frequency propagation models used by the Federal government and private industry
- Provides core telecommunications research and engineering services to promote enhanced domestic competition and new technology deployment, advanced telecommunications and information services and more efficient use of spectrum
- Serves as a principal federal resource for investigating the telecommunications challenges of other Federal agencies, state and local governments, private corporations and associations, and international organizations
- In collaboration with NIST and DHS, performs critical research through the Public Safety Communications Research (PSRC) program in support of public safety communications interoperability and FirstNet deployment
- Develop and influence national and international standards and policies
Office of Public Safety Communications

Oversees implementation of NTIA’s responsibilities under the Middle Class Tax Relief and Job Creation Act of 2012 (Act)

- FTE ceiling: 17
- Coordinates with the First Responder Network Authority (FirstNet) in successfully carrying out its responsibilities to build, operate, and deploy a nationwide public safety broadband network (NPSBN)
- Ensures that States have the necessary funding to plan for the integration and adoption of the NPSBN through the State and Local Implementation Grant Program (SLIGP)
- Creates the State Alternative Plan Program (SAAP) grant program, for those states that opt to operate their state’s radio access network, and SAPP provides authority to enter into spectrum lease with FirstNet and to receive construction financial assistance
- Finalizes and implements a fee review and approval process to help ensure that FirstNet meets its self-sustainability requirements
- Establishes the Next Generation 911 (NG911) grant program to support public safety answer points to upgrade their current 911 systems to enable the new technologies
FirstNet Overview

December 7, 2016
Michael Poth, Chief Executive Officer
mike.poth@firstnet.gov
202-779-2995
Public Safety’s Network

The 9/11 Commission Report

Associations Supporting D-Block Reallocation
National Governors Association
National Association of Counties
National League of Cities
United States Conference of Mayors
Council of State Governments
International City/County Managers Association
National Conference of State Legislatures
International Association of Chiefs of Police
International Association of Fire Chiefs
National Sheriffs’ Association
Major Cities Chiefs Association
Metropolitan Fire Chiefs Association
Major County Sheriffs Association
Association of Public-Safety Communications Officials
National Emergency Management Association
International Association of Emergency Managers
Police Executive Research Forum

National Criminal Justice Association
National Association of Police Organizations
National Volunteer Fire Council
National Troopers’ Coalition
National Organization of Black Law Enforcement Executives
Association of Air Medical Services Advocates for Emergency Medical Services
Emergency Nurses Association
National Association of Emergency Medical Services Physicians
National Association of Emergency Medical Technicians
National Association of State Emergency Medical Service Officials
National Emergency Medical Services Management Association
American Probation and Parole Association
National Association of Regional Councils

2.22.12
FirstNet becomes law

12/24/2016
What is FirstNet?

Mission
- In 2012, Congress created the First Responder Network Authority (FirstNet) as an independent authority within NTIA with broad powers to take “all actions necessary” to ensure the building, deployment, and operation of the nationwide public safety broadband network (NPSBN).”
  - Interoperable dedicated infrastructure for public safety – police, firefighters, and EMS
  - Meet public safety requirements – Quality of Service (QOS), Priority and Preemption
  - Public Safety Grade - Hardened with redundancy increasing reliability during emergencies.

Funding and Assets
- $7B cash – Secured in 2014 thru previous AWS-3 auction also contributing $38B to deficit reduction
- Nationwide license of 20 MHz of valuable Band 14 spectrum for Public-Private Partnership
  - Legislation anticipated the $7 billion would be insufficient funding to build a network from scratch ($47B to $60B estimate)
  - Partner may monetize excess spectrum
- Leverage existing infrastructure and economies of scale
  - Increasing speed to market and risk reduction

Governance
- 15 member Board, FirstNet CEO, and FirstNet Senior Leadership team
- Mandate to coordinate with the 50 states, 5 territories, and Washington, D. C.
- Advised by Public Safety Advisory Committee (PSAC)
FirstNet Board

- **Board** – 15 members required by statute with a cross-section of expertise:

  - 12 members of the FirstNet Board are appointed by the Secretary of Commerce, on staggered three years terms. These non-federal members must be representative of:
    - States, localities, tribes and territories from different regions of the US geographies; and
    - have public safety experience; and/or technical; network; or financial expertise

  - Current Board includes: 4 members from public safety; former Governor; former major city mayor; former federal and state CIO and 5 members from private sector with wireless, financial, and technical expertise

  - 3 members are permanent Federal Board members
    1. Secretary of Homeland Security
    2. Attorney General
    3. Director of the Office of Management and Budget
FirstNet represents one of the few opportunities to enter the U. S. market, or materially expand an existing U. S. network, with new cleared low-band spectrum

- Less capital intensive and less cash intensive than traditional auction and build scenarios
- Offers the potential for significant U. S. and international pull through benefits from public safety services delivery

The number of mobile-connected devices will grow at a compound annual growth rate of 22% from 2014 to 2019\(^1\)

Mobile data traffic will grow 7-fold from 2014 to 2019, a compound annual growth rate of 47%\(^1\)

\(^1\): Cisco VNI 2014-2019 Forecast
### FirstNet Provides
- 20 MHz of low-band spectrum
- Billions in cash
- Relationship with public safety stakeholders
- 25-year contract ordering term (IDIQ)

### Partner Provides
- Assets, capabilities, and synergies to meet FirstNet's stated objectives:
  - Deploy, operate, and maintain the NPSBN
  - Public safety adoption and use of the NPSBN
  - Applications and device ecosystems
- Payments to FirstNet for sustainability and reinvestment

### FirstNet Gets
- Nationwide public safety mission achieved with priority, preemption, and a resilient network
- Improved public safety communications capabilities that increase mission performance
- Annual payments to ensure sustainability

### Partner Gets
- Cash payments based on buildout milestones
- Rights to monetize 20 MHz of spectrum with significant revenue potential for 25 years
- Sticky market of millions of public safety users
- Domestic/global pull-through benefit potential
FirstNet’s Public-Private Partnership

- FirstNet evaluated initial proposals and established a competitive range of the most highly rated offers in October 2016
- Process established to identify best value for Public Safety through objectives based RFP (released in January 2016)
  - Multi-billion dollar public-private partnership capitalizing on existing infrastructure
  - FirstNet self funded for 25 years through payments from partner for the value of FirstNet’s spectrum
  - Unique network that sets a global example for how government can do business with the private sector
- One publicly known bidder (Rivada Mercury, LLC) has protested its exclusion from the competitive range and the case is pending before the U.S. Court of Federal Claims