FirstNet Overview

Maria Royle Vermont Legislative Council October 13, 2017 Sheeting https://www.ntia.doc.gov/files/ntia/publications/january_2016_spectrum_wall_chart.pdf

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- Start

Federal Management of the Spectrum Communications Act of 1934

- NTIA (National Telecommunications and Information Administration, U.S. Department of Commerce)
 - Federal users (national defense; law enforcement and security; transportation; resource management and control; emergencies)
 - (Advises the President on telecommunications issues)
- FCC (Federal Communications Commission)
 - Non-federal users (commercial; state and local government; entertainment)
 - (Regulates telecommunications/information services, such as Broadband Internet Access)

Middle Class Tax Relief and Job Creation Act of 2012 (the Spectrum Act)

Serves Two Purposes:

 Public purpose – establishes a nationwide, interoperable, wireless broadband network dedicated to public safety to address communication failures during national emergencies

2. Private purpose – reallocates and auctions spectrum licenses for commercial use

Spectrum Act Highlights

- Establishes FirstNet (the First Responder Network Authority)
 - An "independent authority" within the NTIA
 - Overseen by a 15 member board
 - Granted a license for the use of the 700 MHz D block (Band 14) spectrum
 - Charged with the building, deployment, and operation of the nationwide public safety broadband network (NPSBN) with prioritized and preemptive coverage for first responders
 - Authorized to partner with a private entity (ATT 25 year contract)
 - May negotiate roaming agreements with commercial network providers that prioritize public safety communications in times of emergency
 - Shall be self-funding; revenue from user fees (public safety and secondary users) and lease fees (network capacity; network infrastructure); revenue reinvested in the network
 - Substantial rural coverage milestones at each phase of construction

Spectrum Act Highlights cont'd

(FirstNet cont'd)

- The network (data) components include:
 - A core network that consists of national and regional data centers and provides connectivity between the LTE radio access network (RAN) and the Internet and the public switched network
 - 2. A LTE **radio access network** (RAN) that consists of cell site equipment, antennas, and backhaul equipment required to enable wireless communications with devices using the public safety broadband spectrum
- A state can opt out and deploy its own LTE RAN

• Spectrum Auction - some proceeds distributed as follows:

- \$135 million in State and Local Implementation Fund
 - Vermont received \$800kf rom the State and Local Implementation Grant Program and is eligible for up to another \$550k, application deadline 12/29/17
- \$ 7 billion in the Network Construction Fund
 - Vermont eligible for up to \$25 million in RAN construction grant funding

Vermont Timeline

- Vermont Public Safety Broadband Network Commission (PSBNC) created by E.O. No. 05-13 to advise the Governor on FirstNet
- Chaired by Terry LaValley, Director, Radio Technology Services, Department of Public Safety
- Vermont receives Draft State Plan, 45-day review period commences

4/30/13

8/30/17

• Televate (who was awarded a bid to provide technical advice and consultation to the PSBNC), evaluates plan





If Vermont Opts-In

- AT&T builds RAN in Vermont at no cost to the State
- First responders are <u>not</u> required to subscribe to the FirstNet service
- Is there any cost? A missed opportunity to achieve the advantages, if any, of a State built, operated, and managed RAN tailored to serve the needs of the State and its public safety entities

If Vermont Opts-Out



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Opt-Out Demonstration Overview

(NTIA 2016 Guidance)

Technical Capability

Does the state, or its partner, have the management capabilities, technically proficient staff, and necessary infrastructure?

Funding to Support

Does the state have sufficient financial resources to construct, operate, maintain, and improve the RAN?

Ongoing Interoperability

Can the state maintain ongoing interoperability with the NPSBN and comply with evolving interoperabilitybased network policy?

Opt-Out Demonstration Overview cont'd

Comparable Timeline

Can the state construct and begin operations within a similar timeframe to the FirstNet State Plan?

Cost Effectiveness

Can the state demonstrate that the State RAN can be constructed and operated at a similar cost to the FirstNet State Plan?

Security

Will the state adhere to FirstNet security standards in operating its State RAN?

Opt-Out Demonstration Overview cont'd

Coverage

Will the state's alternative RAN provide similar coverage, including rural coverage milestones, to the FirstNet State Plan?

Quality of Service

Can the state demonstrate that users of its RAN will have similar experience to users of the NPSBN across the nation?

Statutory Review of IT Projects?

- AoA strategic plan for IT and information security regarding plans for IT activities of the State government (contracted for under Bulletin 3.5). Any proposed IT activity costing more than \$500k shall undergo life-cycle costs analysis, privacy impact, etc. [3 V.S.A. 2222(a)(9)]
- AoA obtains independent expert review of IT activity costing more than \$1 million [3 V.S.A. § 2222(g)]
- But . . . There is a PSBNC

Is There a Legislative Oversight Role?

- Independent legislative review of "current and planned" State IT projects. 2015 and 2017 Capital bills.
- Acceptance of Grants [32 V.S.A. § 5]
 - Governor must send copy of the approval or rejection of a grant to the JFC
 - Upon JFC request, grant not accepted unless approved by JFC or GA
- Constitutional Issues
 - Separation of Powers (VT Constitution)



- Principles of federalism (dual sovereignty) embedded in U.S. Constitution





Questions?