Public Safety Radio Modernization Assessment Closeout Report

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The existing public safety voice and data architecture is decades old and in dire need of a comprehensive upgrade.

In order to provide public safety voice and data operability and interoperability to meet local, state, federal needs and requirements, the following elements were completed:

- A current state 700 Mhz Spectrum analysis,
- Capabilities Assessment
- Needs assessment & GAP analysis and
- Strategic Planning/Budget Recommendations for modernization and sustainability.
Long Term Evolution (LTE) Spectrum Analysis conducted for the following locations:
- Santa Teresa Point of Entry (POE),
- A-Mountain (Las Cruces)
- East Potrillos

Potential for overlapping FCC 700Mhz D-block frequencies which coincide with the Asian/Pacific spectrum used by Mexico
- Completed on-site frequency surveys/spectrum monitoring.

No interference detected on D-Block spectrum shared with Asian/Pacific spectrum used by Mexico as of September, 2012.
Review existing Land Mobile Radio (LMR) capabilities complete. The following entities were poled via on-line questionnaire, email or phone interview:

- Federal agencies: FBI, BLM, State Forestry, US Customs
- State agencies: NM DPS, NMDOT, NMDGF, NMCD, EMNRD, NMEMS, DHSEM
- Local agencies
  - Albuquerque PD, Bernalillo Co. Sheriff/Emergency Mgmt/Consolidated Fire
  - Sandoval and Santa Fe Cos. Sheriff/Emergency Mgmt
  - Additional counties as needed: Eddy, Dona Ana, Luna, Otero, San Juan, and Socorro

- Dispatch and site surveys, coverage analysis
- Spectrum, capacity, interoperability assessment
Key Capability Assessment
Findings

- Many respondents were concerned with the lack of system reliability.
- Poor, if any, frequency interoperability between public safety agencies.
- Manufacturer support no longer available on aging equipment.
- Lack of LMR manufacturer compatibility between agencies.
- Lack of governance to establish and manage standards, policies and procedures with respect to public safety communications.
- Lack of coordination between State, Local and Municipal public safety entities.
Needs Assessment & Gap Analysis

- Conduct needs assessment interviews with:
  - Federal agencies,
  - State agencies and
  - Local participants.

- Perform gap analysis
  - Within and among agencies.
  - Based on the delta between current capabilities and needs assessment results.

- Needs assessment findings formed basis of requirements for design task
Needs Assessment & Gap Analysis

Findings

- Increase urgency to migrate Voice and Data from analog microwave to digital microwave (DMW, completed 12-31-15).

- Public Safety LMR system modernization
  - Upgrade LMR core network
  - State-wide site LMR coverage analysis enhancements
  - Need a formal, survivable structured Governance that serves the needs of State agencies
  - LMR interoperability between Public Safety entities
  - Need for improved public safety broadband data network
Plans & Budgets

- Identify goals, objectives, strategies, and actions to plan, budget, and implement improvement programs

- Identify time-phased initiatives
  - Tied to specific prioritized objectives
  - To meet state and DoIT goals for public safety communications
  - That identify lead/responsible and participating departments and agencies

- Support legislative budgeting process
Plans & Budgets

Findings

- Public Safety Broadband Radio Services (PSBRS)
  - Assigned one engineer per Radio Control Bureau (RCB)
  - Design and implement enhanced state-wide LMR coverage
  - Need for network and equipment monitoring systems
  - Improve asset management for active and spare equipment

- Governance
  - Establish new governance structures that are collaborative, inclusive, and effective
  - Statewide Interoperable Communications Working Group (SICWG) are in the process of updating and addressing changes to governance and outreach. Meetings occur on a monthly basis at the Department of Homeland Security.
Plans & Budgets

Findings

- Define and implement viable technology strategies
  - Collaborating with DPS and DHSEM to develop a state-wide technology plan

- Develop sound operational plans and support structures
  - DoIT Executive Leadership is working with other agency Secretaries and CIOs to establish a consolidated public safety communication plan and budget.
Strategic Roadmap (Years 1-5)

DoIT, DPS and DHSEM executive leadership are working to establish a consolidated strategic roadmap.
This request:

- DoIT is requesting closeout of the Radio Modernization program
  - All program phases are now complete.
  - Contracts have been paid and closed.
  - All deliverables have been completed and received.
Questions