



Gov. CHRIS CHRISTIE | Lt. Gov. KIM GUADAGNO | Dir. CHRIS RODRIGUEZ

NJOHSP**OFFICE OF HOMELAND SECURITY AND PREPAREDNESS**

Interoperability Projects

When procuring voice and data communications equipment, public safety agencies should acquire the types of equipment that support specific functional requirements for infrastructure, dispatch equipment, interoperability solutions and subscriber units.

1. All Projects Must Meet P25 Standards

- a. Phase 1 (Currently Available) – Interoperability systems interworking and backward compatibility with older Land Mobile Radio (LMR) system
- b. Phase 2 (When Adopted Nationally) – Addresses the transition to 6.25 kHz channel bandwidth, and standards for console interface, as well as interface between repeaters and other subsystems
- c. Phase 3 (When Adopted Nationally) – Expected to address the operations and functionality of new aeronautical and terrestrial wireless digital public safety radio used to transmit voice and high-speed data in a multi-agency network

2. Subscriber Units

- a. Advanced features based on agency needs
- b. High capacity rechargeable batteries
- c. Recommended that all units be intrinsically safe
- d. Mil Spec 810 C, D, E, F
- e. RACES units will be considered on an individual basis

3. Network-to-Network Gateways/Console Interfaced Gateways

- a. Provide the best solution that consumes the least amount of spectrum necessary to meet user requirements
- b. Use of spectrum conserving techniques such as multiple access technologies
- c. Use of spectrum or channel sharing techniques
- d. Use of wired communications where possible to carry the appropriate types of communications traffic
- e. Use of compression, error correction or other processing techniques that increase throughput
- f. Consider solutions that have an open interface to enable the efficient transfer of voice, data, and video signals

Attachment G



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4. Shared Networks/Cross-Band and In-Band Repeater Gateways

- a. Use of shared infrastructure elements to benefit multiple disciplines and multiple jurisdictions across a region, State and/or Territory
- b. Use cost-per-user measures to demonstrate cost effectiveness of the project
- c. Use of spectrum or channel sharing techniques
- d. Apply a cost-benefit analysis to determine effectiveness and tangible benefits of chosen solution
- e. Consider economic impact of other interoperability solution options
- f. Consider long-term and recurring costs of proposed solution
- g. Consider degree to which proposed solution will interoperate with systems and the extent to which the investment represents a shared system or system of system

5. Point-to-Point Software Solutions and Internet Protocol (IP) Based Solutions

- a. Use of emerging technology to provide advanced interoperability solutions
- b. Use of commercial services, where appropriate, to support interoperable communications
- c. Use of IP-based technologies to interconnect with other systems
- d. Use of common advanced encryption techniques to secure vital transmissions while maintaining interoperability
- e. Use of standards-based technologies to provide voice and data services that meet wireless public safety service quality
- f. Consider solutions that have an open interface to enable the efficient transfer of voice, data, and video signals

6. SAFECOM

- a. Recipients who receive awards made under programs that provide emergency communication equipment and its related activities must comply with the SAFECOM Guidance for Emergency Communication Grants, including provisions on technical standards that ensure and enhance interoperable communications.