Office of Emergency Communications:

Fiscal Year 2009

SAFECOM Recommended Guidance for Federal Grant Programs

SAFECOM

Homeland Security

U.S. DEPARTMENT OF HOMELAND SECURITY

A Message to Federal, State, and Local Stakeholders

On behalf of the Office of Emergency Communications (OEC), I am pleased to present the Fiscal Year (FY) 2009 *SAFECOM Recommended Guidance for Federal Grant Programs*. As a legacy of the policy and planning components of SAFECOM, OEC is congressionally-mandated to develop and coordinate grant guidance for all Federal programs that fund interoperable emergency communications. To that end, this document will help Federal grant programs target their funds to support National goals and objectives while simultaneously increasing the interoperable and emergency communications capabilities at the State and local levels of government.

For our Federal partners, we encourage you to incorporate these recommendations into your grant programs that fund emergency communications-related activities. This will help ensure that the Federal government is driving consistent and measurable progress towards National goals and objectives.

For our State and local partners, we are well aware that efforts to coordinate interoperable and emergency communications at all levels of government will require transparency among those most affected by these efforts. Moreover, we need your assistance, expertise, and leadership to support and promote the ability of emergency responders and government officials to continue to communicate in the event of natural disasters, acts of terrorism, or other man-made disasters. We are committed to working with you to ensure, accelerate, and attain interoperable and operable emergency communications nationwide. This is especially crucial in our role of coordinating guidance for programs that fund interoperable communications.

Your leadership, combined with the leadership of your colleagues in the Federal government, will ensure that we optimize the limited Federal resources dedicated to interoperable emergency communications.

In keeping with that sentiment, I encourage you–our Federal, State, and local partners–to share your thoughts about this document with me. For questions, comments, or assistance in applying these recommended grant policies, please contact my office at oec@hq.dhs.gov.

Chris Essid
Director
Office of Emergency Communications

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I. Introduction

Title XVIII of the *Homeland Security Act of 2002* (6 U.S.C. 101 et seq.), as amended, calls on the Department of Homeland Security (DHS) Office of Emergency Communications (OEC) to establish **coordinated guidance for Federal grant programs** that fund public safety interoperable communications. In accordance with this statutory requirement, and in coordination with the Office for Interoperability and Compatibility (OIC), OEC has developed the Fiscal Year (FY) 2009 *SAFECOM Recommended Guidance for Federal Grant Programs*.[1]

1.1   Purpose of the Recommended Guidance for Federal Grant Programs

This document outlines **recommended allowable costs and applications requirements** for Federal grant programs providing funding for interoperable emergency communications. The recommendations are designed to ensure that Federal grant funding for interoperable emergency communications is aligned with National goals, objectives, and initiatives established in the National Emergency Communications Plan (NECP).[2] The NECP is the overarching strategy for ensuring that emergency responders can communicate as needed, on demand, and as authorized–at all levels of government–and across all disciplines. In addition, this document is intended to ensure that investments made by State, local, and tribal governments through Federal grant funding align to strategic and tactical plans already developed. By aligning to these National goals and building upon the strategic and tactical planning in place at all levels, grant programs across the Federal government can drive consistent and measurable progress in strengthening emergency communications capabilities nationwide. The NECP goals, objectives, and initiatives, as well as initiatives and gaps identified through strategic planning and tactical exercises, serve as the basis for the recommended allowable cost activities within this document.

> **Purpose**
> - **Ensure that Federal grant funding for interoperable communications is aligned with national goals and objectives**
> - **Ensure alignment of State, local, and tribal investment of Federal grant funding to statewide *and* national goals and objectives**
> - **Drive consistent and measurable progress in strengthening emergency communications capabilities**

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[1] This document was previously titled SAFECOM *Recommended Federal Interoperable Communications Grant Guidance.* Per Title XVIII of the *Homeland Security Act of 2002*, as amended, OEC is responsible for managing the policy and planning elements of the SAFECOM Program, which included development of coordinated grant guidance. The Office for Interoperability and Compatibility (OIC) maintains responsibility for the research, development, testing and evaluation, and standards elements of SAFECOM.

[2] The NECP is available at: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf.

1.2   How to Use This Document

To help Federal grant administrators align their grant programs with the NECP, this document maps the plan's interoperable and emergency communication priorities to common allowable costs, specifically–

- General Application Requirements
- Planning
- Personnel
- Training
- Exercise
- Equipment

Federal grant administrators have limited time to develop guidance or acquire subject matter expertise in interoperability and emergency communications. With these facts in mind, OEC recommends that Federal grant administrators incorporate key factors from this document into their respective agencies' grant guidance addressing interoperability and emergency communications needs. OEC drafted the following sections of this document in a generic manner to allow grant administrators from across the Federal government to easily apply language on allowable costs for interoperable and emergency communications to their own grant programs.

Applying the language from this guidance document to a Federal grant program application kit related to interoperable or emergency communications can help demonstrate compliance with the goals and objectives of the NECP. OEC also encourages grant administrators to offer recommendations on ways to make this guidance document more useable. For questions, comments, or assistance in applying these recommended grant policies, please contact oec@hq.dhs.gov.

II.   Application Requirements and Allowable Costs

OEC understands that Federal grant administrators and programs are subject to different statutory requirements and authorities. Consequently, only portions of the following recommendations may apply to any given grant program. However, OEC strongly encourages grant applicants to incorporate as much of this guidance into their applications as feasible. Doing so will help ensure that Federal funding is driving results in emergency communications according to the goals and objectives of the NECP, and to the initiatives and gaps identified in Statewide Communication Interoperability Plans (SCIP)[3] and Tactical Interoperable Communications Plans (TICP).[4]

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[3] As of April 2008, all States and territories have a DHS-approved Statewide Communication Interoperability Plan (SCIP). All investments should align with the goals, objectives, and initiatives identified in the SCIPs.

[4] In 2006, Homeland Security Grant Program (HSGP) recipients were required to develop and exercise Tactical Interoperable Communications Plans (TICP) in designated Urban Area Security Initiative (UASI) sites.

2.1   General Application Requirements

Applicants should coordinate investments with the statewide interoperability coordinator, the statewide interoperability governing body, and the appropriate stakeholders and/or committees at the State, regional, local, and tribal levels of government. Further, grant applicants are encouraged to submit multi-State, multi-urban area, or regional investments to promote regional collaboration and cost-effective measures.
Finally, grant applications should demonstrate how the proposed investments align to at least one of the following plans–

- Statewide Communication Interoperability Plan
- Tactical Interoperable Communications Plan
- National Emergency Communications Plan

2.2   Planning

Planning activities help to prioritize needs, build capabilities, update preparedness strategies, allocate resources, and deliver preparedness programs across multiple disciplines and levels of government. Interoperable emergency communications planning activities may include any of those listed below.

- **Development and/or enhancement of interoperable emergency communications plans**. Grant funds may be used to develop and/or enhance interoperable communications plans and align such plans to goals, objectives, and initiatives set forth in the NECP, including–

    o Statewide Communication Interoperability Plans
    o Tactical Interoperable Communications Plans
    o Communications system life-cycle plans
    o Disaster emergency communications plans
    o Other regional or local interoperable emergency communications plans

- **Establishment and/or enhancement of interoperability governing bodies.**
    Grant funds may be used to establish or enhance statewide, regional, or local interoperability governing bodies[5] as needed to conduct activities associated with planning, implementing, and managing interoperable emergency communications initiatives.

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[5] The NECP established the National milestone that statewide interoperability governing bodies in all 56 States and Territories should be established as recommended in the Statewide Interoperability Planning Guidebook by July 2009.

- **Development and/or enhancement of interoperable emergency communications assessments and inventories**. Multi-agency and multi-jurisdictional partnerships should facilitate planning activities, such as assessments of–

  - Technology capabilities, specifically the identification and inventorying of infrastructure and equipment
  - Standard operating procedures
  - Training and exercises
  - Usage

- **Development and enhancement of interoperable emergency communications protocols.** Funds may be used to enhance multi-jurisdictional and multi-disciplinary common planning and operational protocols. Activities may include–

  - Programming interoperability channels
  - Developing standard operating procedures
  - Eliminating coded substitutions (specifically, developing and implementing plain language protocols)

- **Use of priority service programs**. Grant funds may be used to facilitate participation in a number of Federal priority service programs. This includes programs designed for both priority service and priority call completion. For example–

  - Telecommunications Service Program (TSP)
  - Government Emergency Telecommunications Service (GETS)
  - Wireless Priority Service (WPS)

2.3   Personnel

Salaried personnel, hiring, overtime, and backfill expenses are allowable expenses if such expenditures support interoperable and emergency communications planning, training, and exercise activities. Specifically, this includes personnel associated with the interoperability coordinator function. However, applicants must identify sustainable sources of funding and integrate new staff in their budgets in future years to maintain these capabilities. Funds may not be used to hire any personnel to fulfill traditional public safety duties or to supplant traditional public safety positions and responsibilities.

- **Hiring of certain part-time staff and contractors or consultants.** Part-time staff may be hired to support planning, training, and exercise-related activities. This includes staff to serve in the following roles, consistent with the SCIPs–

  - Project manager(s) for the statewide interoperability coordinator[6] function, as appropriate
  - Subject matter expert(s) for the statewide interoperability coordinator function, as appropriate
  - Regional, local, or tribal interoperability coordinator(s), as appropriate

  Applicants must follow formal written procurement policy. They may use either their own agencies' policies or the policies set forth in the Federal Acquisition Regulations.

- **Overtime.** These expenses are limited to the additional costs that result from personnel working more than 40 hours per week as a direct result of their performance of approved interoperable and emergency communications activities specified in this guidance. Overtime associated with any other activity is not an allowable expense eligible for grant funds.

- **Backfill-related Overtime.** Also called "Overtime as Backfill," these expenses are limited to overtime costs of personnel who work overtime (as identified above) to perform the duties of other personnel who are temporarily assigned to approved interoperable and emergency communications activities outside their core responsibilities. These costs are calculated by subtracting the non-overtime compensation, including fringe benefits of the temporarily assigned personnel, from the total costs (non-overtime and overtime compensation, including fringe benefits) for backfilling the position.

2.4 Training

Communications-specific training activities should be incorporated into statewide training exercise plans. Training should address a performance gap identified through SCIPs, TICP After Action Reports (AAR), and/or other assessments. Interoperable emergency communications grant funds may be used for the training activities listed below.

- **Development, delivery, attendance, and evaluation of training**. Grant funds may also be used to plan, attend, and conduct communications-specific training workshops or conferences, to include costs related to planning, meeting space, and other meeting costs, facilitation costs, travel, and training development. Communications-specific training should focus on–

  - Use of established operational protocols (such as plain language)

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[6] The NECP established a National milestone specifying that all States and Territories should establish full-time statewide interoperability coordinators or equivalent positions by July 2009.

- o Use of National Incident Management System (NIMS) Incident Command System (ICS)
- o Use of interoperable emergency communications solutions
- o Communications Unit Leader Training, Communications Unit Technician, or other ICS Communications Unit position training

2.6 Exercises

Exercises should be used to both demonstrate and validate skills learned in training and to identify training gaps. Specifically, applicants are encouraged to conduct exercises to achieve Goal 1 of the NECP–

> *By 2010, 90 percent of all high-risk Urban Areas designated within the Urban Area Security Initiative (UASI) are able to demonstrate response-level emergency communications within one hour for routine events involving multiple jurisdictions and agencies.[7]*

Interoperable emergency communications grant funds should be used to focus on the activities listed below.

- **Design, development, execution, and evaluation of exercises.** Grant funds may be used to design, conduct, and evaluate interoperable emergency communications exercises, including tabletop and fully functional exercise formats. Exercise activities should focus on–

  - o Using established operational protocols
  - o Using interoperable emergency communications solutions
  - o Leveraging TICPs to exercise on standard operating procedures
  - o Demonstrating response level communications

2.6 Equipment

Emergency response providers must upgrade and regularly maintain communications systems and capabilities to ensure effective operation. Given the substantial costs and complexities associated with system design, implementation, and maintenance, applicants must provide system life-cycle plans for all communications systems purchased with grant funding to demonstrate long-term sustainability. Regional operable and interoperable solutions, including shared solutions, are strongly encouraged. Grant applicants are encouraged to submit multi-State, multi-urban area, or regional investments to promote regional collaboration and cost-effective measures. Interoperable emergency communications grant funds should be used to focus on the activities listed below.

- **Development of communications system life-cycle plans**

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[7] The OEC will provide further guidance regarding on how applicants can measure and demonstrate achievement of Goal 1 (for example, through incident or exercise After Action Reports).

- **Design, construction, implementation, enhancement, replacement, and maintenance of emergency response communications systems and equipment**

- **Migration to approved open architecture and interoperable next generation systems, where appropriate**

- **Leveraging of existing and emerging technologies (for example, a multi-band/multi-mode capable radio) to expand and integrate disaster communications capabilities among emergency response providers**

- **Project management costs associated with management and implementation of equipment and systems**

- **Governance, development of policies and procedures for, and the conduct of training and exercises on, communications systems and equipment**

- **Procurement of technical assistance services for management, implementation, and maintenance of communication systems and equipment**

Equipment Standards
When procuring equipment for communications systems, whether voice or data, a standards-based approach should be used to begin migration to multi-jurisdictional and multi-disciplinary interoperability. The applicable standards for land mobile radio (LMR) systems and data-related information sharing systems are described below. Applicants must demonstrate how their procurements will comply with these standards, as applicable, or provide compelling reasons for using non-standards-based solutions.

Land Mobile Radio Systems
All new digital voice systems should be compliant with the Project 25 (P25) suite of standards. This recommendation is intended for government-owned or -leased digital land mobile public safety radio equipment. Its purpose is to ensure that such equipment or systems can interoperate with other digital emergency response land mobile equipment or systems. It is not intended to apply to commercial services that offer other types of interoperability solutions. Further, it does not exclude any application if the application demonstrates that the system or equipment being proposed will lead to enhanced interoperability.

With input from the user community, these standards have been developed to support backward compatibility with existing digital and analog systems and to provide for interoperability in future systems. The FCC adopted the P25 suite of standards for voice and low-speed data interoperability in the new nationwide 700 megahertz (MHz) frequency band for the designated interoperability channels. Most Federal agencies with a public safety mission that operate mission critical Push-To-Talk (PTT) radio systems have chosen the P25 suite of standards for their digital radio solutions. This includes the U.S. Department of Defense, which uses this technology for its non-tactical communications.

This guidance does not preclude funding non-P25 equipment when there are compelling reasons for using other solutions. However, the first priority of Federal funding (subject to the statutory authority of the grantor agency or the objectives of the grant program when the

applicant is seeking Federal grant funding) for improving public safety communications is to provide basic, operable communications within a department, with safety as the overriding consideration. Funding requests by agencies to replace or add radio equipment to an existing non-P25 system (such as procuring new portables for an existing analog system) will be considered if there is an explanation for how the radio selection will improve interoperability or support eventual migration to interoperable systems. Absent these compelling reasons, SAFECOM intends that P25 equipment will be preferred for LMR systems to which the standard applies.

In partnership with the National Institute of Standards and Technology, DHS has developed the P25 Compliance Assessment Program (P25 CAP). This program allows users to obtain documented evidence from manufacturers that equipment has been tested and has passed critical normative P25 performance, conformance, and interoperability tests published by the Telecommunications Industry Association. This program is being rolled out in phases, with the first phase covering the Common Air Interface (CAI) up through FY 2009. Additional interfaces will be added to the P25 CAP in subsequent phases. The tests currently covered by the P25 CAP can be found in the P25 CAP Compliance Assessment Bulletin (CAB), Baseline Testing Requirements, available on the SAFECOM program Web site at–

> http://www.safecomprogram.gov/SAFECOM/currentprojects/project25cap/.

A 6-month grace period will begin once DHS has formally recognized the first laboratories assessed for performing the tests specified in the Baseline Testing Requirements CAB. The date upon which the grace period begins will be posted on the SAFECOM program Web site at–

> http://www.safecomprogram.gov/SAFECOM/currentprojects/project25cap/.

During this grace period, equipment delivered to grantees will not be required to have the supporting Supplier's Declaration of Compliance (SDoC) documentation from the manufacturer. Grantees taking delivery of equipment during the grace period will come to an agreement with the manufacturer on the date by which SDoCs will be delivered after the grace period ends. Grantees taking delivery of equipment after the 6-month grace period has ended must obtain SDoCs from the manufacturers upon delivery.

Grantees should explicitly state in the grant application that P25 equipment purchased with DHS grant funds shall meet the requirements of the P25 CAP not later than the time of product acceptance (given the grace period) for base station, portable, and mobile radios implementing the P25 CAI. Grantees must also publish an SDoC and post it at–

> https://www.rkb.us.

P25 equipment that implements P25 interface standards other than the CAI (such as, Inter-RF Subsystem Interface, Fixed Station Substation Interface, Console Subsystem Interface, among others) are not covered by the P25 CAP at this time and therefore do not require an SDoC.

For assistance in determining allowable communications equipment purchases under this section, and in determining when justification material is required, grantees can access web-based technical assistance tools at–

http://www.its.bldrdoc.gov/resources/p25/OICGrantguidancetool.pdf.

The OIC Wireless Communications Grant Guidance Tool will also give users access to detailed information that will be helpful in selecting and procuring Project 25 equipment. In addition, this tool offers links to documents available under the P25 CAP.

Data-Related Information Sharing Systems
Grant funded systems, developmental activities, or services related to emergency response information sharing should comply with the OASIS EDXL data messaging standards. Compliance should include the OASIS EDXL Common Alerting Protocol (CAP), version 1.1 or latest version, and the OASIS EDXL Distribution Element (DE), version 1.0 or latest version. Systems should also comply with the Hospital AVailability Exchange (HAVE) and Resource Messaging (RM) standards, which are expected to be finalized in late 2008. More information on these standards can be found in Appendix A of this document and at–

www.oasis-open.org.

This guidance does not preclude funding of non–OASIS EDXL-compliant systems when there are compelling reasons for using other solutions. Absent such compelling reasons, the OASIS EDXL standards identified above are the preferred standards.

Grant funded systems, developmental activities, or services related to emergency response information sharing should also leverage the National Information Exchange Model (NIEM) for data component or element standards. More information on NIEM can be found at–

www.niem.gov.

For any procurements of equipment with Graphical Information Systems (GIS) equipment, equipment must conform to applicable standards, which may include a common operating picture or minimum level of data layers.