Office of Emergency Communications:

Fiscal Year 2013

SAFECOM Guidance on Emergency Communications Grants

SAFECOM

Homeland Security

A Message to Stakeholders

On behalf of the Office of Emergency Communications (OEC), I am pleased to present the *Fiscal Year 2013 SAFECOM Guidance on Emergency Communications Grants (FY 2013 SAFECOM Guidance).* The *SAFECOM Guidance* is updated annually to provide the most current information on emergency communications policies, eligible costs, technical standards and best practices for State, territorial, tribal, and local grantees investing Federal funds in emergency communications projects.

The *FY 2013 SAFECOM Guidance* stresses the need for continued investment in planning and coordination of emergency communications projects, including investment in the Statewide Interoperability Coordinator (SWIC), Statewide Interoperability Governing Body (SIGB), or Statewide Interoperability Executive Committee (SIEC) activities. Grantees are encouraged to coordinate with the SWIC, SIGB or SIEC to ensure projects support the statewide strategy to improve interoperable emergency communications. Grantees are also urged to support the National Preparedness System as described in Presidential Policy Directive 8 (PPD-8), which requires the engagement of the whole community in preparedness and response planning. Grantees should work with State leaders, public and private entities, and multiple jurisdictions and disciplines, to assess needs, plan projects, coordinate resources, and improve response.

The *FY 2013 SAFECOM Guidance* also provides information on the Nationwide Public Safety Broadband Network (NPSBN). This NPSBN represents an unprecedented national investment in emergency communications that will enhance public safety capabilities and bolster the Department of Homeland Security's (DHS) mission to improve emergency communications nationwide. However, with requirements for the NPSBN still under development, the *FY 2013 SAFECOM Guidance* encourages grantees to invest primarily in planning activities that will help States prepare for the deployment of the NPSBN. At the same time, the *FY 2013 SAFECOM Guidance* recognizes the need to sustain current land mobile radio (LMR) systems and advises grantees to continue developing plans and standard operating procedures, conducting training and exercises, and investing in standards-based equipment to sustain LMR capabilities.

The *FY 2013 SAFECOM Guidance* incorporates the National Emergency Communications Plan (NECP) Goals findings to inform FY 2013 funding priorities and related activities. Grantees are encouraged to target funding toward priorities and activities that address critical emergency communications needs identified by the NECP Goals.

As in previous years, OEC developed the *FY 2013 SAFECOM Guidance* in consultation with the SAFECOM Executive Committee and Emergency Response Council, and SWICs. OEC also consulted Federal agency partners and the Emergency Communications Preparedness Center (ECPC) Grants Focus Group, to ensure that emergency communications policy is coordinated and consistent across the Federal government. OEC encourages grantees to consult the *FY 2013 SAFECOM Guidance* when developing emergency communications investments, and to direct any questions to my office at: oec@hq.dhs.gov.

Ron Hewitt, Director
DHS Office of Emergency Communications

Contents

1. Introduction

SAFECOM is a public safety-driven communications program managed by the Office of Emergency Communications (OEC) and the Office for Interoperability and Compatibility (OIC). SAFECOM works to build partnerships among all levels of government, linking the strategic planning and implementation needs of the emergency response community with Federal, State, local, tribal, territorial governments, to improve emergency communications. The National Emergency Communications Plan (NECP)[1] defines emergency communications as the ability of emergency responders to exchange information via data, voice, and video, as authorized, to complete their missions. Together, the Department of Homeland Security (DHS) and the SAFECOM Executive Committee and Emergency Response Council coordinate on emergency communications policy and standards to ensure projects are compatible, interoperable, and most importantly, meet the needs of end-users. OEC develops the annual *SAFECOM Guidance* which provides guidance for entities applying for Federal financial assistance[2] for emergency communications projects.

1.1 Purpose of the FY 2013 SAFECOM Guidance

The *Fiscal Year 2013 SAFECOM Guidance on Emergency Communications Grants* (*SAFECOM Guidance)* provides guidance to grantees on:

- Emergency communications activities that can be funded through Federal grants
- Technical standards that facilitate interoperability
- Recommendations for planning, coordinating, and implementing emergency communications projects

The *SAFECOM Guidance* serves many purposes. First, its content on policies and standards is designed to advance national emergency communications goals and priorities established in the NECP. Second, the recommendations are intended to help State, local, tribal, and territorial stakeholders develop projects that meet critical emergency communications needs defined in their Statewide Communication Interoperability Plan (SCIP).[3] Finally, it aims to ensure that emergency communications standards and policies across Federal grant programs provide a consistent approach to improving emergency communications nationwide.

The *SAFECOM Guidance* provides general information on eligible activities, technical standards, and other terms and conditions that are common to most Federal emergency communications grants. However, not all of this guidance is applicable to all grant programs. Grants funding emergency communications are administered by numerous Federal agencies and are subject to various statutory and programmatic requirements. As a result, grantees should review grant guidance[4] carefully to ensure the activities they propose are eligible, and that all standards, terms, and conditions required by the program are met.

[1] For more information on the NECP, see: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf.
[2] Federal financial assistance includes grants, loans, cooperative agreements, and other financial assistance provided by the Federal government. For the purposes of this document, these terms are used interchangeably, unless otherwise indicated.
[3] For information on SCIPs, see the OEC website at: http://www.dhs.gov/files/programs/gc_1225902750156.shtm.
[4] For the purposes of this document, "grant guidance" may include Funding Opportunity Announcements (FOA), Grant Notices, Grant Applications, and other formal notices of grants and Federal financial assistance programs.

1.2 Use of FY 2013 SAFECOM Guidance

The *FY 2013 SAFECOM Guidance* should be used during the planning and development of emergency communications projects and in conjunction with other planning documents. Before proposing projects for funding, grantees are encouraged to read Federal and State preparedness documents, including plans and reports,[5] the SCIP and the *FY 2013 SAFECOM Guidance* to ensure projects support, and do not contradict, Federal, State, local, tribal, and territorial plans for improving emergency communications. Specifically, grantees should:

- Consult the NECP to ensure alignment with Federal emergency communications goals and priorities
- Review State plans to ensure projects align with the State's needs
- Coordinate emergency communications projects with the Statewide Interoperability Coordinator (SWIC) to ensure projects:
    - Align with needs in the SCIP and/or SCIP Annual Progress Report
    - Address results from NECP Goal Assessments
    - Comply with recommendations and technical requirements in the *FY 2013 SAFECOM Guidance*

Additional information on these resources is provided in Table 1 below.

[5] There are several documents that grantees should review, including Threat and Hazard Risk Assessments (THIRA), and the State Preparedness Reports (SPR). The National Preparedness System, a concept described in Presidential Policy Directive 8 (PPD-8), is built upon the foundation of identifying and assessing risk. As a condition of grant funding, DHS requires States, territories, and Urban Area Security Initiative (UASI) sites to complete the THIRA process. The result of the THIRA are used to define desired outcomes and set capability targets for all applicable core capabilities outlined in the National Preparedness Goal. These desired outcomes and core capability targets become the foundation for measurable capability estimates. Capability estimates serve as a consistent means to identify the required resources needed to meet capability targets, determine potential gaps in capability or capacity, and allow communities to use a whole community approach to manage risk. The Post-Katrina Emergency Management Reform Act of 2006 requires an SPR from any State or territory receiving Federal preparedness assistance administered by DHS. The SPR provides an assessment of the State's core capabilities by assessing current capability against targets derived through the THIRA, and by documenting any gaps or shortfalls that exist. Grantees are strongly encouraged to review the THIRA and the SPR to ensure that proposed projects help to address critical gaps, needs, and risks. For more information on the plans, see: http://www.fema.gov/preparedness-1/national-preparedness-system. To access your State preparedness plans and reports, see your DHS State Administrative Agency (SAA). To find your SAA, go to: http://coop.fema.gov/government/grant/saa/index.shtm.

Table 1. Essential Resources for Emergency Communications Grantees

Resource	Description
NECP	The NECP is the national plan to improve emergency communications. The NECP provides an overarching strategy, goals, and priorities designed to ensure that emergency responders can communicate across all disciplines as needed, on demand, and as authorized at all levels of government and across all disciplines. Grantees are encouraged to read the NECP to understand national communications goals, and to ensure that investments support, and do not contradict, national goals and priorities. The NECP can be found at: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf.
NECP Goal Assessments	The NECP Goals established national performance metrics for interoperable communications. DHS has been coordinating with States and territories to assess a jurisdiction's ability to demonstrate response-level communications. Information on the NECP Goal can be found at: http://www.dhs.gov/national-emergency-communications-plan-necp-goals.
SWIC	The SWIC serves as the State's single point of contact for interoperable communications, and implements the SCIP. Grantees are strongly encouraged to coordinate projects with the SWIC to ensure that projects support, and do not contradict, statewide efforts to improve emergency communications. To find the SWIC for your State, please contact OEC at: oec@hq.dhs.gov.
SCIP	The SCIP contains the State's strategy to improve emergency communications. Every State and territory was required to develop and submit a SCIP to OEC by December 2008, and to submit annually a report on the progress of the State in implementing its SCIP (i.e., SCIP Annual Progress Report). Many Federal grants funding emergency communications require grantees to align projects to needs identified in SCIPs and/or SCIP Annual Progress Reports. Grantees should review the SCIP for their State and work with their SWIC to ensure that investments support, and do not contradict, statewide plans to improve communications. To find your State's SCIP, please contact your SWIC. If you do not know the SWIC for your State, please contact OEC at: oec@hq.dhs.gov.
SAFECOM website	The SAFECOM website provides information and resources for grantees developing emergency communications projects. The SAFECOM website can be found at: http://www.safecomprogram.gov/default.aspx. For the most recent *SAFECOM Guidance* and list of grants funding emergency communications, see the SAFECOM website at: http://www.safecomprogram.gov/grant/Default.aspx.
Office of Management and Budget (OMB) Grants Circulars	OMB provides grant resources on its Grants Management page at: http://www.whitehouse.gov/omb/grants_default/.

1.3 Key Changes and Updates

This section highlights key changes to the *FY 2012 SAFECOM Guidance:*

- **Emergency Communications Priorities (Section 2).** This section reviews the FY 2013 priorities including leadership and governance, statewide planning, training and exercises, investment in standards-based equipment, and other integral activities. The priorities have not changed significantly from FY 2012; however, some categories have been expanded to include broadband planning activities.

- **Before Applying (Section 3).** This section provides an updated overview of Federal grants and new initiatives affecting emergency communications grants, including Federal initiatives to improve nationwide response, information on the Nationwide Public Safety Broadband Network (NPSBN), as well as current Federal requirements and restrictions on funding that grantees should consider before applying.

- **Eligible Activities (Section 4).** This section includes a review of eligible costs and has been revised to address findings from the NECP Goals Assessments, as well as new guidance on broadband planning costs.

- **Equipment Standards (Section 5).** This section provides updates on Federal policies and technology standards for stakeholders implementing land mobile radio (LMR) and other emergency communications solutions.

- **Grants Management Best Practices (Section 6).** This section provides best practices to ensure the effective implementation of grants and to establish the entity as a trusted steward of Federal grant funding and a credible recipient of future grant funding.

- **Funding Sources (Section 7).** This section offers recommendations on how grantees should consider multiple funding sources, including traditional grants, new broadband-related programs, and other sources that may partially fund emergency communications projects.

- **Appendix.** The Appendix includes an acronym list, OEC's methodology for developing the *FY 2013 SAFECOM Guidance*, and resources grantees can use to develop emergency communications projects. The annual list of grants funding emergency communications will be updated as funding levels are announced.

2. Emergency Communications Priorities

The *FY 2013 SAFECOM Guidance* identifies five investment priorities. These priorities were developed in coordination with stakeholders and Federal agency partners, and are informed by the Middle Class Tax Relief and Job Creation Act (creating the NPSBN); the National Preparedness System as set forth in Presidential Policy Directive 8 (PPD-8); and completion of the NECP Goals Assessments in all 56 States and territories. Many of the activities that were included in *FY 2012 SAFECOM Guidance* as Priority 6: Planning for Investments in Broadband and Other Advanced Technologies[6] have been incorporated into the core set of priorities outlined below, as these activities should be part of the State's ongoing efforts to plan and implement emergency communications improvements. In FY 2013, grantees are encouraged to target grant funding toward the following priorities:

- Priority 1: Leadership and Governance
- Priority 2: Statewide Planning for Emergency Communications
- Priority 3: Emergency Communications Training and Exercises
- Priority 4: Other Integral Emergency Communications Activities
- Priority 5: Standards-Based Equipment

A summary of emergency communications priorities and allowable costs is provided in Table 2.

2.1 Priority 1: Leadership and Governance

In FY 2013, grantees are encouraged to invest in emergency communications leadership and governance structures to continue improving current emergency communications systems, as well as to engage in broadband planning. The SWICs, along with the Statewide Interoperability Governing Body (SIGB) or Statewide Interoperability Executive Committee (SIEC) are critical for assessing needs, conducting statewide planning, coordinating investments, ensuring projects support the SCIP, maintaining and improving current communications systems, and planning for future communications improvements. As such, States should work to ensure that the SWIC or SWIC-equivalent position and the activities of the SIGB and/or SIEC are fully funded.

Tribal, regional, and local entities are also encouraged to fund leadership and governance activities. Strong leadership and governance structures help entities build relationships among participating agencies and improve overall decision-making and response. Strong governance can facilitate the development of operating procedures and planning mechanisms that establish and communicate priorities, objectives, strategies, and tactics during response operation.[7]

[6] In this document, the term "advanced technologies" includes, but is not limited to, the use of emerging technologies to provide advanced interoperability solutions; solutions that allow the use of commercial services, where appropriate, to support interoperable communications; internet protocol (IP)-based technologies; use of common advanced encryption options that allow for secure and vital transmissions, while maintaining interoperability; use of standards-based technologies to provide voice and data services that meet wireless public safety service quality; solutions that have an open interface to enable the efficient transfer of voice, data, and video signals; and investments in these technologies, such as Next Generation 9-1-1 (NG9-1-1), and Bridging System Interface (BSI).

[7] See the National Incident Management System (NIMS) National Standard Curriculum Training Development Guidance at: http://www.fema.gov/national-incident-management-system.

Based on OEC's implementation of the NECP, OEC found that many jurisdictions were able to demonstrate the NECP Goal requirements due to advances in governance groups and the institution of standard operating procedures (SOP) within those jurisdictions, as well as regular training and exercises.[8] Investment in leadership and governance activities can not only help improve response efforts, but also can ensure that emergency communications needs are assessed and addressed, LMR capabilities are maintained, and emergency communications representatives can participate in State-level response and broadband planning meetings.[9]

To support this priority, grantees should target funding toward:

- Sustaining the SWIC position
- Building and expanding governance structures to:
  - Include representatives from multiple agencies, jurisdictions, disciplines, levels of government, tribes, rural areas, subject matter experts, and private industry
  - Integrate statewide leadership and governance structures into broader statewide planning efforts (e.g., statewide broadband planning activities, grants coordination activities, needs assessments, coordination with 9-1-1 planners) to ensure emergency communications needs are represented[10]
  - Conduct outreach and education on emergency communications needs and initiatives

2.2 Priority 2: Statewide Planning for Emergency Communications

The emergency communications community has benefitted from a comprehensive and inclusive approach to planning. States have engaged multiple jurisdictions, disciplines, and levels of government in planning through the development of their SCIPs. Comprehensive planning has enabled States to effectively identify, prioritize, and coordinate investments, and to ensure that proposed investments support statewide planning priorities.

In FY 2013, States and territories should continue to target funding toward planning activities, including updates of statewide plans. The goal of this priority is to ensure that emergency communications needs are continually assessed and addressed, and integrated into State-level risk assessments[11] and preparedness plans.[12]

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[8] See NECP Goal 1 Report: Urban Area Communications Key Findings and Recommendations at: http://www.dhs.gov/national-emergency-communications-plan-necp-goals.

[9] Emergency communications leaders are encouraged to participate in State-level planning meetings and outreach sessions on THIRA, SPR, and Senior Advisory Committees or similar statewide governing bodies that prioritize projects for funding.

[10] The Federal Emergency Management Agency (FEMA) encourages States to leverage existing governing bodies and to establish a Senior Advisory Committee, comprised of specific State-level representatives, including the SWIC, who work together to coordinate grant resources.

[11] Completion of the THIRA is required for entities receiving funding under the FY 2012 Homeland Security Grant Program (HSGP) and Emergency Management Performance Grants (EMPG) programs. Stakeholders should actively engage in the development of the THIRA and convey the impact of various threats and hazards on emergency communications, as well as desired outcomes, to statewide THIRA planners. For more information on the THIRA, see FEMA Information Bulletin (IB) #385: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins#1.

[12] DHS requires HSGP and EMPG grantees to complete the THIRA, and to use the THIRA and a capability estimation process reported through the State Preparedness Report to inform Statewide Homeland Security Strategies, State Preparedness Plans, Emergency Operations Plans, and future investments. Grantees should participate in the development of the THIRA, and engage with State-level planners to integrate communications needs into statewide plans and ensure that emergency communications needs are considered for funding. For more information, see: FY 2012 HSGP Funding Opportunity Announcement at: http://www.fema.gov/fy-2012-homeland-security-grant-program#0.

With the enactment of the Middle Class Tax Relief and Job Creation Act of 2012, and a focus on the development of the NPSBN, stakeholders are encouraged to target FY 2013 funding toward planning, stakeholder outreach, assessment of user needs, and other activities that will help to engage the whole community in emergency communications planning.

To support this priority, grantees should target funding toward critical planning activities, including the following:

- Update SCIPs to:
  - Address findings and gaps identified in After Action Reports (AAR) from real world incidents and planned exercises, NECP Goal Assessments, other State-level preparedness reports and assessments (e.g., Threat and Hazard Identification and Risk Assessment [THIRA], State Preparedness Report [SPR])
  - Incorporate National Preparedness System concepts and DHS whole community[13] language
  - Address plans for implementation of the Federal Communications Commission (FCC) narrowbanding mandate by January 1, 2013
  - Describe strategic broadband planning activities and initiatives in preparation for the future deployment of the NPSBN
- Support statewide emergency communications and preparedness planning efforts, through the allocation of funding to the following planning activities:
  - Conduct/attend planning meetings[14]
  - Engage the whole community in emergency communications planning, response, and risk identification
  - Develop risk and vulnerability assessments (e.g., THIRA)
  - Collect and leverage data (e.g., NECP Goal Assessments, findings from exercises) to assess capabilities, needs, and gaps, and to facilitate coordination and asset-sharing
  - Integrate emergency communications assets and needs into State-level plans (e.g., SCIP, SPR, broadband plans)
  - Coordinate with SWIC, State Administrative Agency (SAA),[15] and State-level planners to ensure proposed investments align to statewide plans (e.g., SCIP, State broadband plan) and comply with technical requirements

[13] Per the National Preparedness Goal, whole community encompasses individuals and families, including those with access and functional needs; businesses; faith-based and community organizations; nonprofit groups, schools and academia; media outlets; all levels of government, including Federal, State, local, tribal, and territorial partners (e.g., SWIC, SIGB/SIEC, state-level emergency management, broadband, and 9-1-1 planners).

[14] This may include State-level meetings to plan for the deployment of the NPSBN, and to consult with FirstNet.

[15] Many Federal grants are awarded to a designated SAA who serves as the official grantee and administrator for the grant. The SAAs for DHS/FEMA grants can be found at: http://coop.fema.gov/government/grant/saa/index.shtm.

2.3 Priority 3: Emergency Communications Training and Exercises

In FY 2013, grantees should continue to invest in emergency communications related training and exercises. Training and exercising helps response personnel understand roles and responsibilities during an emergency, processes for working with other agencies, and how to use new and existing equipment. DHS has found that entities are better able to respond to large-scale planned events due in part to regular training and exercises in those regions.[16] Further, as the NPSBN is deployed, and communications technologies continue to evolve, the need for training and exercises becomes even greater to ensure personnel are proficient in the increasing number of diverse capabilities that are being implemented during incidents and events.

Grantees are encouraged to invest in training and exercises and participate in national-level training and exercises,[17] which have standards and targets that help State, local, tribal, and territorial entities prepare for disasters, and identify, assess, and address capability gaps.

To support this priority, grantees should target funding toward certified training and exercise activities, including:

- Specific National Incident Management System (NIMS)-compliant training (e.g., training in Incident Command System [ICS], Communications Unit Leader [COML] training)[18]
- Exercises that support the adoption, implementation, and use of the NIMS concepts and principles
- Development of SOPs and plain language protocols
- Exercises to support the National Response Framework, National Exercise Program (NEP), and other Federal initiatives to test preparedness (e.g., NECP Goals)
- Training and exercises on new systems, equipment, and SOPs

[16] In its assessment of NECP Goal 1, DHS concluded that all participating UASI regions were able to demonstrate response-level emergency communications to varying degrees and have instituted the necessary capabilities to achieve interoperability among multiple agencies and jurisdictions during large-scale planned events, *due in part to measurable advances in regional governance groups and regular training and exercises in these regions*. From NECP Goal 2 Assessments at the county-level, DHS found that the use of training and exercises enables personnel to understand roles and responsibilities, equipment and use, and how to work with other agencies to effectively communicate in the field.

[17] See Federal standards for training set through NIMS, which can be found at: http://www.fema.gov/emergency/nims/; National Exercise Program (NEP) at: http://www.fema.gov/national-exercise-program; National Level Exercises at: http://www.fema.gov/exercise; and NECP Goals at: http://www.dhs.gov/national-emergency-communications-plan-necp-goals.

[18] Regular training on NIMS/ICS concepts is needed to ensure new and existing staff are proficient in NIMS/ICS concepts. For NIMS-compliant training, see: http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm.

2.4 Priority 4: Other Integral Emergency Communications Activities

Grantees should prioritize projects that are integral to emergency communications, including activities that ensure operability, strengthen interoperability, promote cost-effectiveness, and address documented needs. Grantees should work with Federal, State, local, tribal, territorial, and regional[19] partners to coordinate resources, facilitate mutual aid, and reduce duplication in purchases. To facilitate coordination of resources, grantees are strongly encouraged to coordinate with their SWIC to update the Communications Asset Survey and Mapping (CASM) tool.[20] CASM provides a repository for information about LMR systems, and methods of interoperability used by emergency responders. Grantees can use the CASM to help identify gaps in capabilities and to target funding toward those gaps and needs. Priority 4 also reflects needs identified in NECP Goal Assessments and by stakeholders.[21]

To support this priority, grantees should target funding toward:

- Projects that address needs in the SCIP, SCIP Annual Progress Report, AARs, NECP Goal Assessments, the SPR, or statewide broadband plans
- Implementation of the NECP
- Activities to ensure compliance with the FCC narrowbanding mandate[22]
- Development and implementation of SOPs
- Initiatives that engage the whole community, provide outreach and education to new users, and raise awareness of State strategy and needs in accordance with the National Preparedness System
- Projects that promote regional, intra- and inter-State collaboration
- Inventorying and typing of resources and other projects that promote assessment of assets, asset coordination, and resource sharing (e.g., CASM)

2.5 Priority 5: Standards-based Equipment

In FY 2013, grantees should continue to invest in equipment that is standards-based, to enable interoperability between agencies and jurisdictions, regardless of vendor. To ensure equipment is compliant, grantees should provide technical standards to vendors, include technical specifications in procurement agreements, and obtain sufficient documentation to verify equipment is compliant to the applicable standards.

In FY 2013, grantees are strongly encouraged to invest in equipment that will help to sustain and maintain current LMR capabilities, ensure compliance with the FCC narrowbanding mandate, and provide backup solutions.

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[19] "Regional" for this document is defined as more than one jurisdiction (e.g., more than one State, region, county, local jurisdiction) including intra-State and inter-State, unless defined otherwise in grant guidance.

[20] See OEC's Public Safety Technical Assistance Tools website at: http://www.publicsafetytools.info/start_index.php.

[21] Based on the NECP Goal 1 and 2 Assessments, DHS identified a critical need to integrate response plans and procedures across disciplines. Grantees are encouraged to fund activities that will help to integrate plans and SOPs across disciplines and jurisdictions, to improve the ability of multiple agencies and jurisdictions to respond to disasters and other emergencies.

[22] In December 2004, the FCC mandated that all non-Federal public safety land mobile licensees operating below 512 megahertz (MHz) and using 25 kilohertz (kHz) bandwidth voice channels move to12.5 kHz voice channels by January 1, 2013. For more information, see: http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html.

With the creation of the NPSBN, many grantees may be interested in seeking funding for broadband-related investments. However, because the design and deployment of the NPSBN are still under consideration by the First Responder Network Authority (FirstNet),[23] grantees are encouraged to delay investment in broadband (i.e., long-term evolution [LTE]) equipment until further guidance is issued by FirstNet. Grantees interested in moving forward on broadband deployment should invest in community outreach, planning, assessment of user needs, and other activities that will support State-level efforts to prepare for the NPSBN. For more details on planning activities supported through grants, see Priority 1 (Leadership and Governance) and Priority 2 (Statewide Planning) above.

Grantees are strongly encouraged to consult the Federal granting agency before submitting funding requests for broadband-related investments to determine if costs are allowable under the program.[24] Grantees should also consult the broadband point of contact for the State to ensure the proposed project supports the State-level plan for the NPSBN, and is compliant with FirstNet recommendations and requirements.

To support this priority, grantees should target funding toward standards-based equipment that enables the entity to:

- Sustain and maintain current core capabilities
- Support the implementation of standards-based Project 25 (P25) LMR compliant equipment[25] for mission critical voice
- Meet the FCC narrowbanding mandate
- Sustain backup solutions (e.g., back-up power, portable repeaters, satellite phones)

[23] The Middle Class Tax Relief and Job Creation Act of 2012 created FirstNet as an independent authority within National Telecommunications and Information Administration (NTIA). The Act directs FirstNet to establish a single nationwide, interoperable public safety broadband network. The FirstNet Board is responsible for making strategic decisions regarding FirstNet's operations. For more information, see: http://www.ntia.doc.gov/category/firstnet.

[24] DHS grantees should see IB#386, *Clarification on the Use of DHS/FEMA Public Safety Grant Funds for Broadband-Related Expenditures and Investments*, at: http://www.fema.gov/library/viewRecord.do?id=6104.

[25] For more information on P25 requirements, see: http://www.project25.org/.

Table 2. Summary of Emergency Communications Priorities and Related Allowable Costs

Priorities	Related Allowable Costs

Leadership and Governance	• Sustain the SWIC position
	• Build and expand statewide governance structures (e.g., SIGB/SIEC) to:
	  ○ Include the whole community in planning and membership
	  ○ Integrate into broader statewide planning efforts
	  ○ Conduct outreach and education on emergency communications needs

Statewide Planning for Emergency Communications	• Update the SCIP to:
	  ○ Address findings in AARs, NECP Goal Assessments, and other State-level preparedness reports and assessments
	  ○ Incorporate National Preparedness System and whole community language
	  ○ Address plans for implementation of the FCC narrowbanding mandate
	  ○ Describe strategic broadband planning activities in preparation for the NPSBN
	• Support statewide planning efforts to:
	  ○ Conduct/attend planning meetings
	  ○ Engage the whole community in planning, response, identification of risks
	  ○ Develop risk and vulnerability assessments (e.g., THIRA)
	  ○ Collect and leverage data to assess user needs, capabilities, and gaps
	  ○ Integrate emergency communications assets and needs into State-level plans
	  ○ Coordinate with SWIC, SAA, and State-level planners to ensure proposed investments align to statewide plans and comply with technical requirements

Emergency Communications Training and Exercises	• Specific NIMS-compliant training (e.g., ICS and COML training) • Activities that support the adoption, implementation, and use of the NIMS concepts and principles • Development of SOPs and plain language protocols • Exercises to support the National Response Framework, National Exercise Program, and exercises to test preparedness (e.g., NECP Goals) • Training and exercises on new systems, equipment, and SOPs
Other Integral Emergency Communications Activities	• Projects that address needs in the SCIP, SCIP Annual Progress Reports, AARs, NECP Goal Assessments, the SPR, or new statewide broadband plans • Implementation of the NECP • Activities to ensure compliance with the FCC narrowbanding mandate • Development and implementation of SOPs • Initiatives that engage the whole community, provide outreach and education to new users, and raise awareness of State strategy and needs • Projects that promote intra- and inter-State collaboration • Inventorying and typing of resources • Activities that leverage data and metrics from assessments, exercises, or NECP Goal Demonstrations, to demonstrate need and impact of funds

Standards-based Equipment	• Equipment that will help the entity to:
	  ○ Sustain and maintain current core capabilities
	  ○ Support implementation of P25 equipment for mission critical voice
	  ○ Meet the FCC narrowbanding mandate
	  ○ Sustain backup solutions

3. Before Applying

Before applying for Federal funds for emergency communications, potential grantees should:

- Review the SCIP
- Coordinate with the SWIC or SWIC-equivalent
- Recognize issues affecting emergency communications grants
- Understand Federal grant requirements and restrictions

3.1 Review the SCIP

Every State and territory was required to develop and submit a SCIP to OEC. Additionally, each State and territory is required to submit a report on the progress of the State or territory in implementing its SCIP – the SCIP Annual Progress Report. The SCIP Annual Progress Reports provide key stakeholders with an update on States' progress in achieving the goals and strategic vision identified in the SCIP. The Reports include information on accomplishments, interoperability gaps, as well as current and future strategic initiatives for improving interoperability. Grantees should describe in grant applications how projects align to needs identified in the SCIP and/or SCIP Annual Progress Report.

3.2 Coordinate with the SWIC

To understand the current emergency communications environment, and to ensure that projects support statewide plans to improve interoperability, grantees should coordinate emergency communications investments with the SWIC or SWIC-equivalent.[26] The SWIC is responsible for implementing the SCIP, and for ensuring that projects support, and do not hinder, current statewide efforts to improve emergency communications. Grantees should also consult the SIGB and/or SIEC, including any subject matter experts (SME) serving on the SIGB and/or SIEC (e.g., broadband SMEs, chief information officers, representatives from utilities, legal and financial experts); the appropriate stakeholders within State, local, tribal, and territorial governments; and, other regional entities established to improve emergency communications to ensure that projects:

- Align to needs identified in SCIP and/or other communications plans (e.g., NECP Goal Demonstrations, Tactical Interoperable Communications Plans [TICP], SPR) or to gaps identified in AARs from planned exercises or actual events
- Do not duplicate current efforts
- Are compatible with existing equipment and systems, where equipment is involved
- Promote shared, standards-based systems (e.g., P25 compliant)
- Meet FCC narrowband requirements

[26] Some States require grantees and sub-grantees to coordinate grant submissions with a State Point of Contact (SPOC) or State Administrative Agency (SAA). Grantees should coordinate with the SWIC during project development, and consult the SPOC or SAA on grant submissions, if required.

3.3 Recognize Issues Affecting Federal Emergency Communications Grants

Grantees should be aware of evolving Federal programs, policies, and initiatives affecting emergency communication grants in FY 2013. Grantees should understand how these issues are affecting grants, and consider these issues when preparing grant applications. The issues affecting Federal emergency communications grants in FY 2013 include:

- New developments in broadband
- Continued reduction and streamlining of grants
- FCC Narrowbanding Mandate
- National Preparedness System
- Increased need to demonstrate efficiencies and effectiveness of Federal grant funding

New Developments in Broadband

In February 2012, the Middle Class Tax Relief and Job Creation Act (Act) was signed into law. The provisions in the Act significantly affected Federal broadband policies.[27] The Act:

- Reallocated and designated D-Block spectrum for public safety use
- Required the "give back" of T-band spectrum
- Established and funded the NPSBN
- Authorized the appointment of an Interoperability Board to establish minimum interoperability requirements
- Created an independent governing authority – FirstNet – to manage the construction, operation, and improvement of NPSBN
- Established and funded the State and Local Implementation Grant Program[28]

Since FirstNet is still identifying a network architecture, technical requirements, spectrum access policies, and deployment plans, grantees are strongly advised to target funding toward planning activities (e.g., community outreach and education, documenting user needs), rather than the acquisition of LTE equipment. Grantees are advised to focus grant funding on statewide planning for broadband including:

- Attending statewide broadband planning meetings
- Implementing activities that will help to expand/enhance existing governance structures and integrate existing governance structures into State-level broadband planning
- Developing and implementing processes to help assess stakeholder needs
- Conducting community outreach and education to assess needs and inform planning for the deployment of broadband and other advanced technologies[29]
- Assisting in the update of the SCIP to incorporate high level broadband goals and initiatives, and development of a statewide broadband plan
- Working with the SWIC and/or State broadband point of contact to ensure projects comply with the statewide plan

[27] See: http://www.ntia.doc.gov/category/public-safety.
[28] For information on the Grant, see: http://www.ntia.doc.gov/other-publication/2013/sligp-federal-funding-opportunity.

Grantees interested in investing Federal funds in broadband-related projects should consult the:

- Federal granting agency to understand the agency's requirements and restrictions on broadband investments
- State broadband point of contact to ensure the project supports and does not conflict with the State's broadband plan
- FCC and/or FirstNet during the development of the application to ensure the entity can secure a leasing agreement to operate in the public safety spectrum

Grantees should also continue to monitor current Federal actions affecting broadband and 9-1-1 programs[30] funded through the Act, and work closely with the SWIC and the Federal granting agency to ensure projects remain in compliance with programmatic and technical requirements.

Reduction and Streamlining of Grants

The elimination and consolidation of grants funding emergency communications over the past several years has increased competition for funding among jurisdictions and disciplines. Emergency communications leaders and agencies are strongly encouraged to work with other jurisdictions and disciplines to coordinate resources and projects and to avoid duplication of projects and activities. Additionally, when developing funding proposals, stakeholders are advised to work with State-level planning offices to incorporate emergency communications needs into State-level plans and assessments and to ensure emergency communications projects are prioritized by States. Grantees are encouraged to:

- Coordinate projects with neighboring jurisdictions and multiple agencies
- Develop regional, multi-jurisdictional, multi-disciplinary, and cross-border projects[31] to not only promote greater interoperability across jurisdictions and agencies, but also to pool grant resources, facilitate asset-sharing, and eliminate duplicate purchases
- Leverage assessment data (e.g., NECP Goals) to develop strong statements of need that can be shared with State leaders responsible for prioritizing projects for funding[32]
- Identify additional sources of funding for emergency communications improvements[33]

[30] The Middle Class Tax Relief and Job Creation Act provides the National Highway Traffic Safety Administration with $115 million for grants to improve 9-1-1 services. Updates on the 9-1-1 Grant Program will be posted on the National 9-1-1 Program's website at http://www.911.gov/ when funding becomes available.

[31] Grantees should work with SWICs and the FCC to ensure that projects do not interfere with the 800 MHz rebanding effort occurring along the U.S.-Canada and U.S.-Mexico borders. For more information on the rebanding process, see: http://transition.fcc.gov/pshs/public-safety-spectrum/800-MHz/. Grantees are reminded that Federal funding may not be allocated to international entities, unless authorized by law, and placement of Federally-funded equipment on international property may be subject to special terms and conditions. Grantees should work closely with grant officers on these projects.

[32] Grantees are encouraged to leverage NECP Goal Demonstrations, AARs, and similar assessments to demonstrate where there are gaps in emergency communications, and to appeal to State-level leaders for funding to address those gaps.

[33] For additional sources of funding, see the FY 2013 List of Grants Funding Emergency Communications posted to the SAFECOM website at: http://www.safecomprogram.gov/grant/Default.aspx.

FCC Narrowbanding Mandate

In December 2004, the FCC mandated that all non-Federal public safety LMR licensees operating below 512 megahertz (MHz) and using 25 kilohertz (kHz) bandwidth voice channels move to 12.5 kHz voice channels by January 1, 2013. Grantees are encouraged to allocate grant funds (where allowable) to plan and implement narrowbanding activities that will ensure compliance with the FCC-mandated deadline of January1, 2013. Grantees should continue to be proactive in their implementation efforts given that non-compliant public safety agencies may not be able to communicate with systems operating on new narrowband channels; further, even if communications are possible, they may be degraded.

To assist State, local, tribal, and territorial levels of government in achieving this mandate, many grants that fund interoperable communications equipment allow grant funds to be used for narrowband-related activities,[34] including:

- Development of narrowband plans
- Assessment of narrowband compliant assets and capabilities
- Training associated with narrowband transition
- Replacement of non-narrowband compliant equipment
- Acquiring/upgrading tower sites needed to comply with narrowband conversion[35]
- Reprogramming existing equipment to comply with narrowband conversion

National Preparedness System

In November, 2011, DHS released a description of the National Preparedness System, as described in PPD-8, which outlines a systematic approach for sustaining, building, obtaining, and delivering core capabilities to prevent, protect, mitigate, respond to, ad recover from all threats and hazards to achieve the National Preparedness Goal. The National Preparedness System reflects the "belief that the entire emergency management team – which includes all levels of government, the private and non-profit sectors and individual citizens – plays a key role in keeping our communities safe and secure, meeting the needs of survivors when disaster strikes and preventing the loss of life and property."[36] The National Preparedness System focuses on three key concepts:

- An "All-of-Nation" and "Whole Community" approach to security and resilience, integrating efforts across Federal, State, local, tribal, and territorial governments, and the private and non-profit sectors;
- Core capabilities required to confront any challenge; and,
- A consistent assessment system methodology, focused on outcomes that can be used to measure and track progress to achieve our National Preparedness Goal.[37]

[34] Generally, Federal licensing fees are *not* allowable under most Federal grants; however, public safety grantees should not anticipate having such expenses because public safety entities are exempt from FCC filing fees. For more information, see: http://transition.fcc.gov/fees/.
[35] Some Federal grants do not allow construction or ground-disturbing activities. Consult the grant officer on these activities.
[36] See: https://www.fema.gov/preparedness-1/national-preparedness-system.
[37] For information on the National Preparedness Goal, see: http://www.fema.gov/preparedness-1/national-preparedness-goal.

As a result, many grants that fund emergency communications[38] now require grantees to engage the whole community in planning. It is expected that FY 2013 Federal grant programs will require grantees to demonstrate how a whole community approach to project planning was used, and explain how core capabilities were improved. Grantees are encouraged to engage their community early in project development to ensure they can provide evidence of community involvement in applications. Engaging the whole community in project planning not only improves preparedness and response, but also strengthens grant applications.

Grantees are also expected to support the National Preparedness System through their involvement in the completion of the THIRA and SPR. To further the National Preparedness System, grantees should:

- Engage the whole community in planning activities, including, assessing needs, coordinating resources, involving the whole community in response (e.g., through development of the SCIP Annual Progress Report, involvement in the THIRA, engagement of multiple jurisdictions, disciplines, and levels of government in project planning)
- Include their whole community approach in grant applications
- Participate in broader statewide planning initiatives (e.g., response planning, broadband planning, THIRA), to ensure emergency communications needs are incorporated into statewide plans and prioritized for funding

Increased Need to Demonstrate Effectiveness of Federal Grant Funds

Federal agencies are facing increasing pressure to demonstrate the impact and effectiveness of Federal grant programs and projects.[39] In FY 2013, grantees should expect to see increased grant reporting requirements, including the submission of project-level information, performance measurement data, increased financial reporting, and/or progress reports. The purpose of this requirement is to assist Federal agencies with their ability to analyze and report on the effectiveness of grant funding. To this end, grantees are strongly encouraged to:

- Develop performance measures at the start of the grant
- Include interval measures of performance to gauge project progress
- Track performance and report on the impact of funds on emergency communications
- Include metrics on improvements in interval and final grant reports

Grantees are also encouraged to leverage existing documentation and data (e.g., SCIPs, AARs, findings from NECP Goal Assessments) to help measure performance, and demonstrate how gaps in capabilities will be/were addressed through the use of Federal grant funding.

For additional assistance, see: OEC's Communications Interoperability Performance Measurement Guide at: http://www.safecomprogram.gov/oecguidancedocuments/Default.aspx.

[38] Community engagement and involvement are essential components of most DHS grants.
[39] See the Government Accountability Office's report on duplication at: http://www.gao.gov/products/GAO-12-342SP.

3.4 Understanding Federal Grant Requirements and Restrictions

Federal Grant Requirements

Emergency communications grants are administered by numerous Federal agencies in accordance with various statutory, programmatic, and departmental requirements. Grantees are encouraged to carefully review grant guidance to ensure applications meet all grant requirements, including:

- Program goals
- Eligibility requirements
- Application requirements (e.g., due dates, submission dates, matching requirements)
- Allowable costs and restrictions on allowable costs
- Technical standards preferred, required, or allowed under each program

Additionally, grantees should be aware of common requirements for grants funding emergency communications,[40] including:

- **Environmental and Historic Preservation (EHP) Requirements.** Grantees must comply with all applicable EHP laws, regulations, Executive Orders, and agency guidance. Grantees are strongly encouraged to discuss projects with Federal grant program officers to understand EHP restrictions, requirements, and review processes prior to starting the project.

- **NIMS.** Homeland Security Presidential Directive 5 (HSPD-5), *Management of Domestic Incidents*, requires the adoption of NIMS to strengthen and standardize preparedness response, and to receive preparedness grant funding. State, local, tribal, and territorial grantees should ensure that the most recent NIMS reporting requirements have been met.[41]

- **SPR Submittal.** Section 652(c) of the Post-Katrina Emergency Management Reform Act of 2006 (Pub. L. No. 109-295), 6 U.S.C. §752(c), requires any State that receives Federal preparedness assistance to submit an SPR to the Federal Emergency Management Agency (FEMA). Grantees should consult with the SAA to ensure that the most recent SPR has been submitted.

[40] While these are common requirements that affect many emergency communications grants, they may not apply to all grants; therefore, grantees should consult their grant guidance and grant officer for specific questions on grant requirements.

[41] National Integration Center (NIC) has advised State, local, tribal governments to self-assess their respective progress relating to NIMS implementation objectives in the NIMS Compliance Assistance Support Tool (NIMSCAST). The list of objectives against which progress and achievement are assessed and reported can be found at: http://www.fema.gov/emergency/nims/ImplementationGuidanceStakeholders.shtm#item2.

- **THIRA.** In FY 2013, DHS is requiring grantees receiving funding assistance from the Homeland Security Grant Program (HSGP) and the Emergency Management Performance Grant (EMPG) to conduct a THIRA.[42] The THIRA is a tool that allows a jurisdiction to understand its threats and hazards and how the impacts may vary according to time of occurrence, season, location, and other community factors. This knowledge helps a jurisdiction establish informed and defensible capability targets.[43] Grantees are expected to engage the whole community in the development of the THIRA to ensure that all risks are included in the State THIRA.

  Costs related to the development of the THIRA are allowable under some DHS grant programs. Grantees should be aware that DHS funding may be placed on hold until the THIRA is submitted. Further, grantees should be aware that the THIRA submission will not be a pre-requisite for applying for grant funding, but it will be an annual performance requirement upon the award of identified FEMA preparedness grants. Other jurisdictions, such as local units of government and regional planning groups, are strongly encouraged to complete a THIRA and to use the THIRA to inform and prioritize investments.

Grantees should ensure that all grant requirements are met and that they can implement the project as proposed and within the grant period of performance; properly manage grant funding; fulfill grant reporting requirements; and comply with Federal grant restrictions. Below are the most common restrictions that affect emergency communications grants.

Federal Grant Restrictions

Grantees should be aware of common restrictions on Federal grant funding and should consult the grants officer with any questions.

- **Commingling of Funds.** Grantees must ensure that Federal funds are used for purposes that were proposed and approved, and have financial systems in place to properly manage grant funds. Grantees cannot commingle Federal sources of funding. The accounting systems of all grantees and sub-grantees must ensure that Federal funds are not commingled with funds from other awards or Federal agencies. Each award must be accounted for separately.

- **Cost Sharing/Matching Funds.** Grantees must meet all matching requirements prescribed by the grant.[44] If matching funds are required under a grant, grantees must provide matching funds or in-kind goods and services that must be:

[42] Grantees that must complete a THIRA include SAAs receiving HSGP or EMPG funds, and UASIs receiving UASI funding from DHS. Tribes receiving funding through the Tribal HSGP are encouraged, but not required to complete a THIRA. See FEMA IB#385 and IB#385(a) at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins#1.
[43] See the THIRA website at: http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5825.
[44] Cost sharing/matching requirements vary by grant. Grantees should contact the grant officer for the program in question.

  - Allowable under the program and associated with the investment
  - Applied only to one Federal grant program
  - Valued at a cost that is verifiable and reasonable
  - Contributed from non-Federal sources
  - Treated as part of the grant budget
  - Documented the same way as Federal funds (in a formal accounting system)

- **Funding and Sustaining Personnel.** In general, the use of Federal grant funding to pay for staff regular time is considered personnel and is allowable. Grantees are encouraged to develop a plan to sustain critical communications positions in the event that Federal funds are not available to support the position in future years. Overtime[45] and Backfill-related Overtime[46] may be allowable under the grant program, but may be restricted to certain activities (e.g., grant-funded training and exercises). Grantees should read grant guidance carefully to ensure that Overtime and Backfill-Related Overtime are allowable before spending funds on these activities.

- **Supplanting.** Grant funds cannot supplant (or replace) funds previously funded or budgeted for the same purpose. Most Federal grants funding emergency communications restrict grantees from hiring personnel for the purposes of fulfilling traditional public safety duties or to supplant traditional public safety positions and responsibilities.

[45] Some Federal grants permit the use of funds for overtime related to training and exercises. 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 attendance at approved interoperable and emergency communications activities (i.e., training or exercises).

[46] Some Federal grants allow funds to be used for back-fill related overtime. These expenses are limited to costs of personnel who work overtime to perform the duties of other personnel who are temporarily assigned to grant-funded activities (e.g., to attend approved, grant-funded emergency communications training or to participate in grant-funded exercises). These costs are calculated by subtracting the non-overtime compensation, including fringe benefits of the temporarily assigned personnel, from the total costs for backfilling the position. Grantees should ensure that grant funds can be used for overtime and should consult their grant officer to ensure that overtime costs are correctly calculated.

4. Eligible Activities

The following section details eligible emergency communications activities commonly funded by Federal grants, including personnel and common costs allowable under the four common cost categories: Planning and Organization, Training, Exercises, and Equipment.[47] Applicants seeking to improve interoperable emergency communications are encouraged to allocate grant funding to these activities.

The intent of this section is to raise awareness as to the types of costs that can be covered under most Federal grants funding emergency communications. Grantees should note, however, that all activities listed may not be eligible for funding under all grant programs. Applicants should read each grant guidance and related information carefully to ensure that activities proposed are eligible under the program before developing or submitting applications.

4.1 Personnel

Many Federal grants allow grantees to hire full- or part-time staff, contractor staff, and/or consultants to assist with emergency communications planning, training, and exercise activities.[48] Allocating funding toward personnel helps ensure that grants and grant-funded projects are managed, that State-level planning meetings are attended, that emergency communications needs are represented, and plans are completed. Personnel can be hired to develop and conduct training and exercises, and to complete AARs.

Eligible Personnel Costs

- **Personnel to assist with planning.** Full or part-time staff, contractors, or consultants may be hired to support emergency communications planning activities, including:
    - Statewide, local, tribal, territorial, or regional interoperability coordinator(s)
    - Project manager(s)
    - Program director(s)
    - Emergency communications specialists (e.g., frequency planners, radio technicians)
- **Personnel to assist with training.** Full- or part-time staff, contractors, or consultants may be hired to support emergency communications training activities, including personnel who can:
    - Assess training needs
    - Develop training curriculum
    - Train the trainers
    - Train emergency responders
    - Develop exercises to test training

[47] The general cost categories for grants include: Planning, Organization, Equipment, Training, and Exercises (POETE). Some grants do not provide a category for Organizational costs, but allow organizational costs to be included under the Planning cost category. Grantees should be aware that emergency communications personnel, planning, and organizational costs are often allowable under the Planning cost category for grants. Grantees should consult specific grant guidance for allowable costs.

[48] Typically, the use of Federal grant funding to pay for staff or contractor regular time is considered personnel.

- Support training conferences
- Develop and implement a curriculum covering technical issues raised by broadband and other advanced technologies
- Serve as SMEs (e.g., environmental engineers, grant administrators, financial analysts, accountants, attorneys)

- **Personnel to assist with exercises.** Full- or part-time staff, contractors, or consultants may be hired to support exercises. This includes personnel that will:

  - Assess needs
  - Plan and conduct exercises in compliance with NIMS and the Homeland Security Exercise and Evaluation Program (HSEEP)
  - Implement NECP goal measurements and assessments
  - Lead After Action Conferences and prepare AARs

Additional Requirements and Recommendations for Personnel Activities

Grantees should be aware of common restrictions on Federal grant funding for emergency communications personnel.

- **Sustaining Grant-Funded Positions.** Grantees should ensure that funding for critical communications positions is sustained after the grant period of performance has ended to ensure core capabilities are maintained.

- **Overtime.** Some Federal grants permit the use of funds for overtime related to training. 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 attendance at approved interoperable and emergency communications activities (e.g., approved emergency communications training and exercises).

- **Backfill-related Overtime.** Some Federal grants allow funds to be used for back-fill related overtime. These expenses are limited to costs of personnel who work overtime to perform the duties of other personnel who are temporarily assigned to grant-funded activities (e.g., to attend approved, grant-funded emergency communications training or exercises). These costs are calculated by subtracting the non-overtime compensation, including fringe benefits of the temporarily assigned personnel, from the total costs for backfilling the position. Grantees should ensure that grant funds can be used for overtime and should consult their grant officer to ensure that overtime costs are correctly calculated.

4.2 Planning and Organization

Allocating grant funding for planning helps entities identify and prioritize needs, define capabilities, update preparedness strategies, refine communications plans, identify where resources are needed most, and deliver preparedness programs across multiple disciplines and levels of government. Grant recipients are strongly encouraged to assess needs before planning projects, and to carefully plan projects before purchasing equipment.

Eligible Planning and Organization Costs

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

    - SCIPs and SCIP Annual Progress Reports
    - TICPs or other regional interoperable emergency communications plans
    - Disaster emergency communications plans
    - Communications system life cycle planning, including migration planning
    - Plans for narrowband conversion and compliance
    - Plans for 800 MHz rebanding
    - Updates to SCIPs to describe strategic broadband planning activities
    - Plans for relocating existing systems operating in the T-band[49]
    - Stakeholder statements of need, and concept of operations (CONOPS)
    - As-is and proposed enterprise architectures*
    - System engineering requirements*
    - Acquisition planning for the procurement of systems or equipment*
    - Planning for back-up communications in the event that primary systems or equipment fail (e.g., contingency and strategic planning)
    - Planning for training and exercises
    - Plans to address findings in NECP Goal Assessments and AARs
    - Plans to demonstrate or achieve NECP Goals and recommendations

NOTE: While these types of planning activities are generally allowable for LMR investments, some activities are marked with an asterisk (*) to indicate they may be restricted for broadband-related investments until more specific guidance is available on the NPSBN system architecture and requirements. Grantees are strongly encouraged to consult their Federal granting agency and/or Program Manager before developing applications or proposing modifications to existing projects to determine if those activities are allowable under the grant.

[49] The Middle Class Tax Relief and Job Creation Act of 2012 stipulates that the FCC shall reallocate the T-Band spectrum (470-512 MHz band) currently used by public safety entities, conduct competitive bidding to grant licenses for the use of that spectrum, and use the proceeds from the competitive bidding to make grants to cover the relocation costs of public safety entities from the T-Band spectrum. The Act requires that relocation shall be completed not later than two years after the date on which the competitive bidding is complete. For information on the Act, see: http://www.ntia.doc.gov/category/public-safety. For an overview of T-Band issues, see: http://www.npstc.org/TBand.jsp.

- **Engagement of State, local, tribal, and territorial entities in planning.** Many Federal grants require engagement of the whole community in planning to adequately assess and address needs, and to implement the National Preparedness System.[50] The National Preparedness Goal and the National Preparedness System concepts, as described in PPD-8 recognize that the development and sustainment of core capabilities[51] are not exclusive to any single level of government or organization, but rather require the combined effort of the whole community. As a result, the following activities are often supported through Federal grants funding emergency communications:

    - Conducting conferences and workshops to receive input on plans
    - Meeting expenses related to planning
    - Public education and outreach on planning
    - Travel and supplies related to planning, coordination meetings
    - Attending planning or educational meetings on emergency communications

- **Establishment and/or enhancement of interoperability governing bodies.** Grant funds may be used to establish or enhance statewide (e.g., SIGB), regional (multi-State, multi-urban area), or local interoperability governing bodies. Statewide bodies are often leveraged to lead activities associated with planning, implementing, and managing interoperable emergency communications initiatives. Eligible activities may include:

    - Developing Memoranda of Understanding (MOU) and Memoranda of Agreement (MOA) to facilitate participation in planning and governance activities
    - Meeting or workshop expenses associated with receiving input on plans or supporting a funded activity
    - Public education and outreach to increase participation in governing bodies
    - Travel and supplies for governing body meetings
    - Attending planning or educational meetings on emergency communications and/or public safety broadband issues
    - Developing SOPs and other templates to provide access to and use of existing resources and infrastructure)

- **Development of emergency communications assessments and inventories**. Grantees are encouraged to allocate grant funding to planning activities, such as assessments of:

    - Technology capabilities, infrastructure, equipment (e.g., CASM, fleet maps)
    - SOPs, coordination of interoperability channels, regional response plans
    - Training and exercises
    - Narrowband compliance capabilities, assets, and gaps in coverage
    - Current broadband usage and user needs
    - Development of cost maintenance models[52] for equipment and usage

[50] DHS programs encourage engagement with the whole community in response planning.
[51] Core capabilities include Prevention, Protection, Mitigation, Response, and Recovery, and are further defined in the National Preparedness Goal on the FEMA website at: http://www.fema.gov/preparedness-1/national-preparedness-goal.
[52] For information on common maintenance costs for emergency communications projects, see FEMA IB#337: http://www.fema.gov/pdf/government/grant/bulletins/info337.pdf.

- **Development and enhancement of interoperable emergency communications protocols.** Funds may be used to enhance multi-jurisdictional and multi-disciplinary common planning and operational protocols, including the development or update of:

    - SOPs, shared channels and talk groups, and the elimination of coded substitutions (i.e., developing and implementing common language protocols)
    - Partnership agreements, MOUs, cross border agreements
    - Plans to integrate SOPs across disciplines, jurisdictions, levels of government, and into mutual aid agreements
    - Response plans to specific disasters or emergencies
    - Field guides and templates for field guides

- **Preliminary planning for broadband and other advanced technologies.** Grant funds may be used to begin planning for broadband and other advanced technologies. Activities may include:

    - Preliminary planning for broadband deployment (e.g., defining user needs)
    - Updating SCIPs to incorporate high level broadband goals and initiatives, and development of comprehensive broadband plans
    - Developing plans in response to broadband requirements issued by FirstNet (e.g., migration plans, contingency plans, feasibility studies)[53]
    - Preliminary planning for other advanced technologies

- **Use of priority service programs.**[54] Grant funds may be used to facilitate participation in a number of Federal priority service programs, including:

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

[53] Development of these plans will not be funded until FirstNet issues guidance on the technical requirements of the network.
[54] For more information on priority services, see: http://gets.ncs.gov/index.html.

Additional Requirements and Recommendations for Planning Activities

Grantees should consider targeting funding to support Federal planning initiatives and grant requirements, including:

- **Submission of SPR.** Any State that receives Federal preparedness assistance from DHS must submit an SPR to FEMA.[55] Grantees should ensure the SPR has been submitted, and should work with State preparedness professionals to include emergency communications needs in SPRs. Grant funds can be used to coordinate and update plans.

- **Development of THIRA.** In FY 2013, DHS is requiring grantees receiving funding assistance from HSGP and EMPG to conduct a THIRA. Grantees are expected to engage the whole community in the development of the THIRA to ensure that all risks, desired outcomes, and capability targets are included in the State THIRA. Costs related to the development of the THIRA are allowable under some DHS grant programs. Grantees should be aware that DHS funding may be placed on hold until the THIRA is submitted. Further, grantees should be aware that the THIRA submission will not be a pre-requisite for applying for grant funding, but it will be an annual performance requirement upon the award of identified FEMA preparedness grants. Grantees are encouraged to participate in the development of the THIRA and to use the THIRA to inform investments.[56]

- **Compliance with NIMS.** Under many grant programs, State, local, tribal, and territorial entities must adopt NIMS as a condition of grant funding. Implementation of NIMS requires coordination with State and local emergency response planners, completion of training courses, the adoption and use of the ICS, a plain language requirement, and the inventorying and typing of resources, and more. Many of these activities can be supported through grants.

- **Submission of SCIP Annual Progress Reports.** OEC is required to report to Congress on progress against SCIPs. States submit SCIP Annual Progress Reports annually to help OEC meet this reporting requirement. Costs related to preparing the SCIP Annual Progress Report or updating the SCIP, including personnel and planning meetings, are allowable under most preparedness grants.

- **NECP Goal Assessments.** All 56 States and territories conducted activities to measure the NECP Goals in their jurisdictions. States, localities, tribes, and territories may continue to use grant funding to support NECP Goal activities, including addressing gaps identified from the assessments.

[55] Section 652(c) of the Post-Katrina Emergency Management Reform Act of 2006 (Public Law 109-295), 6 U.S.C. §752(c).
[56] For more information on the THIRA, see: FEMA IB#385 and IB#385(a) at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins#1.

4.3 Training

Eligible Training Costs

Recipients are encouraged to allocate Federal grant funds to support emergency communications and incident response training. Communications-specific training activities should be incorporated into statewide training and exercise plans, and reflected in SCIP Annual Progress Reports. Training projects should address a performance gap identified through SCIPs, TICPs, AARs, and/or other assessments, including the NECP Goals. Training helps to ensure that personnel are familiar with SOPs and equipment, and that equipment is operational. Grantees are strongly encouraged to include training in projects that involve the development of new SOPs or the purchase of new equipment.

- **Development, delivery, attendance, and evaluation of training**. Grant funds may be used to plan, attend, and conduct communications-specific training workshops or meetings; to include costs related to planning, meeting space, and other logistics costs, facilitation, travel, and training development. Communications-specific training[57] should focus on:

    - Use of SOPs, and other established operational protocols (i.e., common language)
    - NIMS/ICS training
    - COML, Communications Unit Technician (COMT), or ICS Communications Unit position training
    - Training in the use of advanced data capabilities (e.g., voice, video, text)
    - Disaster preparedness training
    - Peer-to-peer training
    - Regional (e.g., multi-State, multi-urban area) training
    - Training associated with narrowband transition and conversion
    - Training related to the broadband planning process

- **Expenses related to training.** Many Federal grants allow funds to be used for expenses related to training, including:

    - Travel related to training
    - Public education and outreach on training opportunities
    - Supplies related to training (e.g., signs, badges, and other materials)

[57] DHS training catalogs are available at: https://www.firstrespondertraining.gov/odp_webforms/. The Federal-sponsored course catalog can be found at: https://www.firstrespondertraining.gov/webforms/pdfs/fed_catalog.pdf, and the State-sponsored course catalog at: https://www.firstrespondertraining.gov/webforms/pdfs/state_catalog.pdf.

Additional Requirements and Recommendations for Training Activities

Grantees should target funding toward certified emergency communications activities, including:

- **Compliance with NIMS.** State, local, tribal, and territorial entities must adopt NIMS[58] as a condition of many Federal grants. Given that the implementation of NIMS requires certain training courses, grantees may target grant funding towards NIMS-compliant training.[59]

- **Completion of COML.** OEC, in partnership with OIC, FEMA, the National Integration Center (NIC), and practitioners from across the country, developed performance and training standards for the All Hazards COML and formulated a curriculum and comprehensive All-Hazards COML Course. Grantees should target grant funding toward this critical training to improve on-site communications during emergencies, as well as satisfy NIMS training requirements.

4.4 Exercises

Exercises should be used to both demonstrate and validate skills learned in training and to identify gaps in capabilities. To the extent possible, exercises should include participants from multiple jurisdictions and agencies such as emergency management, emergency medical services, law enforcement, interoperability coordinators, public health officials, hospital officials, and other disciplines, as appropriate.

Eligible Exercise Costs

- **Design, development, execution, and evaluation of exercises.** Grant funds may be used to design, develop, conduct, and evaluate interoperable emergency communications exercises, including tabletop and fully functional exercises. Activities should focus on:

    - Demonstrating response level communications per the NECP Goals
    - Using new or established operational protocols
    - Using interoperable emergency communications equipment
    - Designing and executing exercises of the new equipment purchased to facilitate the conversion process to narrowband, or serving as strategic technology reserve
    - Designing and executing regional (multi-State, multi-urban area) exercises
    - Designing and executing HSEEP compliance exercises
    - Designing and executing NIMS compliant training and exercises
    - Using broadband equipment and systems, and other advanced technologies
    - Testing SOPs

[58] NIMS is a national framework for response, that requires State, local, tribal, and territorial stakeholders to adopt a national ICS, complete certified training, and integrate the framework into State and local protocols.
[59] For more information on NIMS training, see: http://www.fema.gov/national-incident-management-system.

- **Expenses related to exercises.** Many Federal grants allow funds to be used for expenses related to exercises, including:

    - Meeting expenses related to planning or conducting exercises
    - Public education and outreach related to exercises
    - Travel and supplies related to exercises

Additional Requirements and Recommendations for Exercise Activities

Grantees should target funding toward Federal exercise initiatives, including participation in the communications components of the National Level Exercises and:

- **Management and execution of exercises in accordance with HSEEP.** The HSEEP Library provides guidance for exercise design, development, conduct, and evaluation of exercises, as well as sample exercise materials. *HSEEP Volume V: Prevention Exercises*, provides recommendations for designing, developing, conducting, and evaluating prevention-focused exercises. The HSEEP Library can be found at: https://hseep.dhs.gov.

- **Compliance with NIMS.** In 2003, the President issued HSPD-5, *Management of Domestic Incidents*, which requires all Federal departments and agencies to adopt NIMS and to use it in their individual incident management programs and activities, including all preparedness grants. Grantees should review the NIMS requirements at: http://www.fema.gov/emergency/nims/index.shtm, and ensure that all Federally-funded training and exercise activities are NIMS-compliant.

- **Coordination with State-level partners.** Communications-specific exercise activities should be coordinated with the SWIC and/or SIGB/SIEC to facilitate participation by the appropriate entities (e.g., public safety, utilities, private sector) and resources (e.g., deployable assets).

4.5 Equipment

Emergency response providers must regularly maintain communications systems and equipment to ensure effective operation, as well as upgrade their systems when appropriate. Grantees are strongly encouraged to invest in standards-based equipment that supports statewide plans for improving emergency communications and interoperability among systems.

- **Design, construction,[60] implementation, enhancement, replacement, and maintenance[61] of LMR and other emergency communications systems and equipment,[62] including:**
    - System engineering requirements
    - As-is and proposed enterprise architectures
    - Development of interoperability verification and validation test plans
    - Development of system life cycle plans
    - Migration to approved, open-architecture, standards-based interoperable technologies
    - Leveraging existing and other advanced technologies (e.g., multi-band/multi-mode capable radio) to expand and integrate disaster communications capabilities among emergency response providers
    - Project management costs associated with equipment and systems
    - Procurement of technical assistance services for management, implementation, and maintenance of communications systems and equipment
    - Reimbursement of cellular and satellite user fees when used for back-up emergency communications[63]

- **Conversion to 12.5 kHz narrowband equipment.** The FCC mandated that all non-Federal public safety land mobile licensees operating between 150-512 MHz and using 25 kHz channel bandwidth in their radio systems migrate to 12.5 kHz channels by January 1, 2013. Grantees should prioritize grant funding toward the following:
    - Replacing non-narrowband compliant equipment
    - Acquiring/upgrading additional tower sites to maintain coverage after conversion
    - Reprogramming existing equipment to operate in compliance with the narrowbanding mandate

[60] Not all Federal grants permit construction-related activities. Consult the grant officer to determine whether construction activities are allowed. For grants that support construction-related activities, see EHP requirements that apply to select construction-related activities in this guidance.

[61] For DHS preparedness grants, FEMA has issued guidance on the use of grant funds for maintenance and operations. See IB #336 and #348, located at: at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins#1.

[62] While the activities listed are generally allowable for traditional LMR investments, these activities may be restricted for broadband-related investments. Grantees are strongly encouraged to consult their Federal granting agency before developing broadband proposals for funding to determine if those activities are allowable under the grant.

[63] Many public safety entities leverage commercial services to augment emergency communications. Reimbursement of cellular and satellite fees are often allowable under Federal grants.

- **Site upgrades for LMR and other emergency communications systems**[64]
    - Installing or expanding battery backup, generators, or fuel systems
    - Evaluating existing shelter space for the inclusion of new communications equipment
    - Conducting tower loading analysis to determine feasibility of supporting new antennas and equipment
    - Analyzing site power and grounding systems to determine upgrades needed to support additional communications equipment
    - Analyzing physical site security provisions to determine upgrades and enhancements (e.g., fences, lighting, alarms, cameras, shelter access hardening, physical protective measures)

- **Upgrading connectivity capabilities for LMR and other emergency communications systems**[65]
    - Documenting existing wireline and wireless backhaul resources to determine used and excess capacity (e.g., connectivity type [i.e., fiber, wireline, cable] at communications sites and existing public safety facilities)
    - Analyzing existing Internet Protocol (IP) backbone to determine gaps in supporting high bandwidth public safety communications system access and applications
    - Planning and modeling network capacity to ensure backhaul links and aggregation points are appropriately provisioned
    - Upgrading existing backbone to support advanced capabilities (e.g., multi-protocol line switching [MPLS])
    - Installing fiber optic connections to support enhanced communications and networking capabilities
    - Installing microwave connectivity to support enhanced communications and network capabilities
    - Assessing and documenting the usage of wireless communications capabilities including:
        - Mobile data systems facilitated through government-owned or commercial services
        - Applications
        - Devices or platforms supported
        - Speed/capacity
        - Accessible data
        - Redundancy and resiliency of systems or services
        - Cost of services and systems
        - Existing gaps in capabilities, connectivity, coverage, or application support
- **Purchase of:**

[64] While the activities listed are generally allowable for traditional LMR investments, these activities may be restricted for broadband-related investments. Grantees are strongly encouraged to consult their Federal granting agency before developing any broadband-related proposals for funding to determine if those activities are allowable under the grant.

[65] While the activities listed are generally allowable for traditional LMR investments, these activities may be restricted for broadband-related investments. Grantees are strongly encouraged to consult their Federal granting agency before developing any broadband-related proposals for funding to determine if those activities are allowable under the grant.

- Standards-based interoperable communications equipment listed on the Authorized Equipment List[66]
- Equipment that will facilitate the transition of existing systems from the T-Band to authorized spectrum
- Ancillary equipment to facilitate planning and implementation of interoperable public safety grade communications systems and capabilities (e.g., RF and network test equipment including handheld spectrum analyzers, cable testers)

Additional Requirements and Recommendations for Equipment Purchases

Grantees should anticipate additional requirements when purchasing equipment with Federal grant funds, including:

- **Coordination with the SWIC, State-level broadband point of contact, and other emergency communication partners.** Grantees are strongly encouraged to coordinate with the SWIC, State-level broadband point(s) of contact, and other State, local, tribal, and territorial partners to ensure consistency with statewide plans, and compatibility among existing and proposed emergency communications systems.

- **Compliance with SAFECOM technical standards.** Grantees must ensure that all grant-funded equipment complies with the SAFECOM technical standards in Section 6 of this Guidance, unless otherwise noted in a program's grant guidance.[67] Many Federal grants require grantees to explain how their procurements will comply with the applicable standards for LMR systems and data-related information sharing systems, or provide compelling reasons for using non-standards-based solutions. Grantees should document all purchases and evidence of compliance with standards-based requirements.

- **Compliance with FCC Requirements.** Grantees are encouraged to consult with the FCC during application development to determine whether projects will be able to access the appropriate spectrum for its planned operations or if a waiver is needed. Grantees can contact the FCC at PSHSBinfo@fcc.gov.

- **Compliance with Federal EHP laws and policies.** Grantees must ensure that Federally-funded projects comply with relevant EHP laws. The installation of communications towers and other ground-disturbing activities frequently requires EHP review. Each agency (and sometimes, each program) has its own EHP compliance process. Grantees should discuss proposed construction-related activities with grant offices *before* beginning work to determine whether proposed activities are allowed, and to determine if proposed activities are subject to EHP review.[68]

[66] For a list of equipment typically allowed under grants, see the FEMA Authorized Equipment List on the Responder Knowledge Base at: https://www.rkb.us/lists.cfm. NOTE: Grantees should delay purchase of LTE equipment until further guidance is issued by FirstNet, and consult funding agencies before submitting broadband-related investments for funding.

[67] Technical standards and requirements vary among Federal grant programs (especially grants funding research and testing). Applicants should review grant guidance to ensure that specific standards, terms, and conditions under the grant are met.

[68] To learn more about Federal EHP requirements, see the Council on Environmental Quality Regulations, 40 CFR Part 1500-1508, or the U.S. Department of Energy website at: http://ceq.hss.doe.gov/nepa/regs/ceq/toc_ceq.htm.

- **Adoption of new technologies.** Grantees are encouraged to migrate to approved, open architecture and to leverage existing and other advanced technologies (e.g., multi-band/multi-mode capable radio) to expand and integrate disaster communications capabilities among emergency response providers.

- **Sustainment of current LMR capabilities.** Grantees are strongly encouraged to sustain current LMR capabilities to sustain mission critical voice capabilities, as well as to ensure their LMR systems continue to deliver reliable communications.

- **Compliance with Federal procurement requirements.** As a condition of funding, recipients agree to comply with Federal procurement requirements. Grantees are responsible for ensuring open and competitive procurements, subject to the specific requirements of the grant program, and applicable State or local procurement requirements. Grantees are required to have written procurement policies in place, are encouraged to follow the same policies and procedures it uses for procurement from its non-Federal funds, and should include any clauses required by the Federal government. The following are key procurement tenets when using Federal funds:

    - Procurement transactions should be conducted to ensure open and free competition
    - Grantees/sub-grantees should avoid non-competitive practices (e.g., contractors that developed the specifications for a project should be excluded from bidding)
    - Grantees/sub-grantees may not supplant, or replace, non-Federal funds that are already budgeted or funded for a project

- **Promotion of regional capabilities.** Grantees should coordinate and collaborate with agencies from neighboring States and regions to facilitate regional operable and interoperable solutions, including shared solutions.

- **Development of communications system life cycle plans.** Emergency response providers must upgrade and regularly maintain communications systems to ensure effective operation. Some programs require grantees to submit system life cycle plans for equipment purchased with Federal grant funds.[69] As a result, grantees should develop a system life cycle plan for any communications system.

- **Understanding of cost share**. Federal grants often require recipients to provide a percentage of total costs allocated to equipment. Federal funds cannot be matched with other Federal funds, but can be matched through State, local, tribal, or territory cash and in-kind contributions. Match requirements are often waived for ancillary territories. Grantees should review cost share requirements for Federal grants funding emergency communications equipment.

[69] For guidance on system life cycle planning, see: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=324.

5. Equipment Standards

Grantees should purchase standards-based and advanced technologies that promote interoperability. When procuring equipment for communications systems, whether voice or data, they should use an open standards-based approach to facilitate interoperability between jurisdictions and disciplines at all levels of government, and to ensure interoperability between Federally-funded investments. The applicable requirements for LMR systems, Voice over Internet Protocol (VoIP) systems, and data-related information sharing systems (including broadband applications) are described below.

5.1 Standards for Land Mobile Radio Systems (P25 Suite of Standards)

To maximize opportunities to improve interoperability across investments, grantees should ensure that digital voice systems and equipment purchased with Federal grant funding are compliant with the P25 suite of standards, unless otherwise noted in a program's grant guidance.[70] The P25 suite of standards is published by the Telecommunications Industry Association (TIA).[71] TIA is a recognized American National Standards Institute (ANSI) standards development organization. The P25 standards provide a number of technical specifications for emergency communications equipment that are designed to ensure that equipment is interoperable. To date, TIA has published over 75 documents detailing the specifications, messages, procedures, and tests applicable to the 11 interfaces, features, and functions offered by P25. The test documents include performance, conformance and interoperability test procedures to ensure compliance with the applicable standards. Although not a part of the actual suite of standards, the P25 Statement of Requirements (SoR) is an informative document that addresses user needs. The SoR is published by the Project 25 Steering Committee on an annual basis.[72]

For additional information on P25 information and resources, grantees can register for the Project 25 Technology Interest Group (PTIG) website at: http://www.project25.org/.

To ensure projects are compliant with the P25 suite of standards, grantees should:

1. **Review and Understand Technical Standards**
   Grantees should review the technical specifications detailed in the TIA documents to determine which standards are applicable to the proposed purchase and project. To gain a better understanding of technology standards and options, grantees may wish to develop and release a Request for Information (RFI).[73]

[70] Grantees should read grant guidance carefully to ensure compliance with standards, allowable cost, documentation, reporting, and audit requirements as outlined in each grant guidance.
[71] The 2010 P25 suite of standards is available at: http://www.tiaonline.org/all-standards/committees/tr-8.
[72] See: http://www.project25.org/documents/other-documents-of-interest/147-p25-sor-introduction.
[73] An RFI is a formal request for specific information about current technologies and services and their corresponding limitations and about different vendor approaches for delivering a solution or service.

2. **Include P25 Standards in Statement of Requirements/Bids**
   Grantees should include all applicable standards and expectations for interoperability in any statement of requirements/statement of needs or bid for communications procurements funded through Federal grants. This will help develop a shared understanding between buyers and vendors for determining what certification or compliance with a standard means to the agency making the purchase.

   Grantees are responsible for ensuring open and competitive procurements, subject to any specific requirements of a particular grant program and applicable State or local procurement requirements or regulations. Grantees should avoid using product specifications developed by a specific vendor or targeted to a specific product in the requirements. This could limit the ability of other vendors to respond to the Request for Proposal (RFP) and the number of competitive proposals that the community will receive.[74]

3. **Select P25 Eligible Equipment**
   Grantees can use the Responder Knowledge Base (RKB) website to identify equipment that has been tested based on the P25 Compliance Assessment Program (P25 CAP).[75] For more information, see: https://www.rkb.us/search.cfm?typeid=2.

4. **Obtain Documented Evidence of P25 Compliance**
   To ensure equipment purchased is P25 compliant, grantees using Federal funds to purchase equipment are strongly encouraged to obtain documented evidence from the manufacturer that the equipment has been tested and passed all the applicable, published, normative P25-compliance assessment test procedures for performance, conformance, and interoperability as defined in the final and latest P25 CAP Compliance Assessment Bulletins for testing requirements found at:
   http://www.safecomprogram.gov/currentprojects/project25cap/Default.aspx.

   Grantees should be prepared to demonstrate how their procurements comply with these requirements. When purchasing P25 LMR equipment/systems, grantees should, at a minimum, ensure the vendor has participated in equipment testing consistent with the P25 CAP. Equipment covered in the *Project 25 Compliance Assessment Program Requirements*[76] document is tested in accordance with applicable standards and policies of the P25 CAP, and evidence of this testing is documented through Supplier's Declarations of Compliance and Summary Test Reports that have been posted to http://www.rkb.us.[77]

   If documentation is not available through the P25 CAP, agencies should obtain documented evidence from the manufacturer that the equipment has been tested and passed all of the applicable, published, normative, P25 test procedures for performance, conformance, and interoperability.

[74] See Enhancing Communications Interoperability: Guidelines for Developing Requests for Proposals at: http://www.safecomprogram.gov/SiteCollectionDocuments/GuidelinesforRFPDevelopmentCW62806.pdf.
[75] For more information on the P25 CAP Program, see: http://www.pscr.gov/projects/lmr/p25_cap/p25_cap.php.
[76] http://www.safecomprogram.gov/SAFECOM/currentprojects/project25cap/.
[77] On the "Products" page of the RKB, grantees can search equipment by standards, and individual equipment pages for product details. See: https://www.rkb.us/search.cfm?typeid=2.

Securing documentation of compliance either through the P25 CAP Program and/or through the manufacturer will help to verify that equipment purchased is P25 compliant, and is interoperable with other P25 systems and equipment when the P25 feature, function or interface is used in accordance with the standard. Compliance with P25 standards will help ensure that public safety agencies, across disciplines and jurisdictions, and at all levels of government can communicate in emergencies, and will help to improve emergency communications nationwide.

5. **Ensure compliance with P25/Advanced Encryption Standard (AES), if applicable**
   In order to ensure the interoperability of encrypted communications, devices used by responders must share a common algorithm. Purchase of non-standard encryption features may inhibit interoperability between response agencies.

   Therefore, grantees using Federal funds to purchase encryption options for new or existing communications equipment should ensure that encrypted capabilities are compliant with the P25 Block Encryption Protocol. Grantees investing in encryption are strongly encouraged to invest in AES 256-bit. The P25 suite of standards references the use of AES and Data Encryption Standard-Output Feedback (DES-OFB) in the Project 25 Block Encryption Protocol, ANSI/TIA-102.AAAD.

   Grantees seeking to use Federal grant funds to purchase non-standard encryption features or capabilities for new or existing equipment, must ensure AES is included as well to ensure their devices have the capability to interoperate in an encrypted mode.

   Grantees currently using DES-OFB may continue to invest in this encryption method, but should plan to migrate to AES as soon as possible. The continued use of DES-OFB or other non-standard encryption algorithms is strongly discouraged. The Federal government recognizes AES as a more robust encryption algorithm and strongly recommends entities migrate to AES; migrating to AES will help to ensure future interoperability with Federal entities.

6. **Ensure Additional Features Purchased are P25 Compliant**
   When Federal grant funds are used to purchase new P25 LMR equipment/systems containing non-standard features or capabilities, and a comparable P25 feature/capability is available, grantees must ensure the standards-based feature or capability is included as well. Further, if Federal grant funds are used to upgrade existing equipment/systems or to add non-standard features or capabilities, and a comparable P25 feature/capability is available, grantees must ensure that the standards-based feature or capability is included as well.

7. Written Justification Required for non-P25 Purchases

Authorizing language for most emergency communications grants strongly encourages investment in standards-based equipment. Many agencies will not approve nonstandards-based equipment unless there are compelling reasons for using other solutions. Funding requests by agencies to replace or add radio equipment to an existing non-P25 system (such as procuring new portable radios for an existing analog system) will be considered if there is a compelling reason why such equipment should be purchased, and written justification of how the equipment will advance interoperability and support eventual migration to interoperable systems. Therefore, if grantees are using Federal grant funds to purchase equipment that does not align with national voluntary consensus standards, including P25, grantees should submit written justification to grant program offices explaining the need to purchase non-standard equipment, and how that purchase will serve the needs of the applicant better than equipment or systems that meet or exceed such standards. Absent compelling reasons for using other solutions, agencies considering new radio or system acquisitions should invest in standards-based equipment and are expected to migrate to P25 compliant equipment.

These technologies may include IP-based solutions that should not require nor involve the acquisition of non-P25 systems or equipment. Regardless of the technology, grantees should ensure that projects promote, and do not hinder, interoperability, and deliver capabilities that approach the functional equivalent of a common standards-based shared system.

5.2 Standards for VoIP Systems

When purchasing bridging or gateway devices that have a VoIP capability to provide connectivity between LMR systems, those devices must, at a minimum, implement either the Bridging Systems Interface (BSI)[78] specification or the P25 Inter Radio Frequency Sub-System Interface (ISSI) as a part of their VoIP capability.

[78] The BSI is a VoIP interface between bridging or gateway devices. More information is available at: http://www.safecomprogram.gov/currentprojects/voip/Default.aspx.

5.3 Standards for Data-Related Information Sharing Systems

Organization for the Advancement of Structured Information Standards (OASIS) Emergency Data eXchange Language (EDXL)

The OASIS EDXL suite of data messaging standards facilitates information sharing among public safety agencies.

Grant-funded systems, developmental activities, or services related to emergency response information sharing should comply with the OASIS EDXL suite of data messaging standards. Compliance should include the following OASIS EDXL standards:

- Common Alerting Protocol (CAP), version 1.1 or latest version
- Distribution Element (DE), version 1.0 or latest version
- Hospital AVailability Exchange (HAVE), version 1.0 or latest version
- Resource Messaging (RM) standards, version 1.0 or latest version

This guidance does not preclude funding of non-OASIS EDXL compliant systems when there are compelling reasons for using other solutions. Funding requests by agencies to use non-OASIS EDXL compliant systems will be considered if there is a compelling reason why such equipment should be purchased, and written justification of how the equipment will advance interoperability and how the purchase will support eventual migration to interoperable systems. Absent such compelling reasons, the OASIS EDXL standards are the preferred standards. For more information, see: http://www.oasis-open.org.

National Information Exchange Model

National Information Exchange Model (NIEM) is a framework established by DHS and the Department of Justice (DOJ) to enable streamlined and secure information sharing of data among Federal, State, local, tribal, and territorial agencies, and with private sector entities. NIEM focuses on cross-domain information exchange across multiple levels of government, thereby allowing organizations and agencies to share information quickly and effectively without rebuilding systems. Grant funded systems supporting emergency response information sharing should leverage the NIEM for data component or element standards.

NIEM is not a software program, a computer system, or a data repository but a framework made up of two key components:

- A data dictionary of more than 7,000 terms that are commonly used in an information exchange
- A repeatable, reusable process for developing information exchange requirements

The resulting work product is an Information Exchange Package Documentation (IEPD), which is a set of artifacts that define a particular data exchange. For example, there is an IEPD that defines the information content and structure for an Amber Alert, a bulletin or message sent by law enforcement agencies to announce the suspected abduction of a child. IEPDs define the process by which data is exchanged and is currently used by all 50 States.

Grantees are encouraged to leverage the NIEM website to develop a greater understanding of data exchange functions and processes. Information on NIEM can be found at: https://www.niem.gov/Pages/default.aspx. In addition, NIEM has developed specific guidance for grantees which can be found at: https://www.niem.gov/aboutniem/grant-funding/Pages/implementation-guide.aspx.

Preparedness-Technology, Analysis, and Coordination (P-TAC) Center: Supporting Technology Evaluation Project (STEP)

Grant funded systems, developmental activities, or services related to emergency response information sharing should also comply with user acceptance testing and/or conformance testing through the STEP managed by FEMA P-TAC Center.[79] STEP provides testing of commercial software and hardware products, and reports on product conformity to standards (conformance testing) and NIMS concepts and principles (user acceptance testing). Findings from STEP tests may be accessed through the RKB website to assist grantees in making purchases.

5.4 Standards for Broadband Technologies

NPSBN Background

The deployment of a nationwide, interoperable mobile broadband network for first responders is a priority in FY 2013. The Middle Class Tax Relief and Job Creation Act authorized the design and deployment of the nationwide network, and included provisions for funding the planning and construction of the network. Major provisions of the Act are underway. However, specific guidance on the network architecture, related technical requirements, and spectrum access is still under development. Therefore, grantees are strongly encouraged to delay investments in broadband equipment until FirstNet issues further guidance on the network, agencies can ensure projects comply with technical requirements and will integrate into the NPSBN, and entities can secure authority to operate in the spectrum.

Grantees should focus on planning and outreach, consult their Federal granting agency before developing any broadband-related proposals for funding to determine if those activities are allowable under the grant, and consult the SWIC and State broadband point of contact to ensure the proposed project supports the State's broadband plan. Further, grantees should continue to monitor current Federal actions affecting broadband investments, to ensure future projects are compliant with new programmatic and technical requirements.

[79] More information on STEP and the P-TAC Center and the products and services available to the response community to include STEP can be found at: https://www.ptaccenter.org/main/index.

Standards for Other Broadband Technologies

Over the past several years, public safety agencies have leveraged other broadband technologies (e.g., Wi-Fi, WiMAX, and mesh networks) to supplement current public safety communications. These solutions, which are either agency-owned or provided by a commercial provider, allow agencies to access voice, data, and video applications. The use of common standards-based commercial technologies (i.e., IEEE 802.11n) minimizes interoperability concerns, and the sharing of wireless network infrastructures reduces costs for State and local public safety systems.[80]

Grantees may be able to use Federal grant funds for costs related to the implementation of advanced technologies. Grantees should work closely with commercial suppliers and providers to ensure grant-funded systems and equipment will be compatible and interoperable with current solutions. Grantees are encouraged to implement innovative solutions that will yield improvements to current communication capabilities and help the agencies plan for and prepare for the deployment of the NPSBN.

[80] FCC Tech Topic #11: WiMAX Applications for Public Safety at: http://transition.fcc.gov/pshs/techtopics/techtopics11.html.

6. Grants Management Best Practices

The proper management of grants enables grantees to effectively implement projects, access grant funds, and establish the entity as a trusted and capable steward of Federal funding, able to manage additional funds in the future. This section provides guidance and best practices for grantees to leverage throughout the grant lifecycle. Table 3 below provides best practices during the four major phases of the grant:

- Planning grant applications (Pre-Award)
- Managing grant funding (upon Award)
- Implementing grant-funded projects (Post-Award), and
- Completing Federal grant projects (Close-Out)

Table 3. Suggested Actions and Best Practices to Leverage During Grant Cycle Phases

Phases	Suggested Actions/Best Practices
Pre-Award	• Review and understand the SCIP • Coordinate with the SWIC and the whole community to document need, align projects to plans, and identify funding options (grants and loans) • Work with SAA to include projects in State preparedness plans and to secure funding • Review grant requirements included in FOA or grant guidance • Consult the funding agency, FCC, and *FY 2013 SAFECOM Guidance* Resources • Align projects to Federal plans and initiatives • Include coordination efforts (whole community) in applications • Identify staff to manage financial reporting and programmatic compliance requirements • Develop project and budget milestones to ensure timely completion • Performance measures and identify metrics that will help demonstrate impact • Consider potential impacts of EHP requirements, and impact on implementation timelines • Ensure proper mechanisms are in place to avoid commingling and supplanting of funds • Evaluate the ability of sub-grantees to manage Federal funding • Consider how the project will be sustained after grant funding has ended
Award	• Review award agreement to identify special conditions, budget modifications, restrictions on funding, pass-through and reporting requirements, and reimbursement instructions • Update the proposed budget to reflect changes made during review and award • Inform sub-recipients of the award and fulfill any pass-through requirements
Post-Award	• Establish repository for grant file and related data to be collected and retained from award through close-out, including correspondences, financial and performance reports, project metrics, documentation of compliance with EHP requirements and technology standards • Ensure fair and competitive procurement process for all grant-funded purchases • Understand the process for obtaining approval for changes in scope and budget • Adhere to proposed timeline for project/budget milestones; document and justify delays • Leverage Federal resources, best practices, technical assistance • Complete financial and performance reports on time • Draw down Federal funds as planned in budget milestones or in regular intervals
Close-Out	• Complete projects within grant period of performance • Maintain and retain data as required by the award terms and conditions • File close-out reports; report on final performance

7. Funding Sources

Grantees should consider many sources for grant funding information, from traditional grants that have been used to improve emergency communications, to new broadband-related programs, and other sources of funding that may partially fund emergency communications projects.

Traditional Grant Funding

OEC is charged with coordinating Federal grant funding. Through its work with the ECPC Grants Focus Group, OEC identified 25 Federal grants and loans that fund emergency communications.[81] When applying for these funds, grantees are encouraged to:

- Identify current grant funding available and alternative sources of funding
- Review eligibility requirements, program goals, and allowable costs[82]
- Understand what past grants have funded in your jurisdiction
- Partner with entities eligible to receive other sources of funding

Other Sources of Funding

While this Guidance has traditionally covered Federal *grant* programs, there are other grant and loan programs that can provide extensive funding for State, local, tribal, and territorial public safety communications needs. For example, the U.S. Department of Agriculture (USDA) Rural Utility Service's (RUS) integrated interoperable emergency communications and 9-1-1 upgrade authority in its Telecommunications Loan Program, and loans and grants from USDA Rural Development's Community Facilities Program have provided critical funding for emergency communications projects.

OEC has included loans in the list of grants posted to the SAFECOM website.[83] Grantees should be aware of the different requirements between grants and loans. Grantees should work with State, local, tribal, and territorial public safety and financial representatives to understand loan requirements and to ensure their proposals meet all requirements under each program.

Also, there are several Federal programs that are not solely focused on public safety communications but have proven to be useful to enhancing public safety communications (e.g., Rural Telecommunications and Rural Electrification Programs). These programs can improve access to 9-1-1 services; provide all hazards warnings; ensure integrated, interoperable, emergency communications; provide critical infrastructure protection and outage prevention; and, assure standby power to emergency responders. Grantees are encouraged to identify additional sources of funding, such as rural grants and loans, and work with eligible entities for those programs to improve communications infrastructure.

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[81] For an updated list of Federal grants and loans that fund emergency communications, see: http://www.safecomprogram.gov/grant/Default.aspx. Grantees can find and search grants and loans at: http://www.grants.gov.

[82] FEMA has allowed the use of current grant funds for maintenance and operations (M&O) costs on equipment previously paid for under certain FEMA grant programs. Please see IB#336 and IB#348 for specific guidance on using grant funds for M&O. IBs are available at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins.

[83] See: http://www.safecomprogram.gov/grant/Default.aspx.

Appendix A – Report Methodology

The *FY 2013 SAFECOM Guidance for Emergency Communications Grants (FY 2013 SAFECOM Guidance)* provides Federal grantees with recommendations, priorities, policies, technical standards, and best practices for improving emergency communications. OEC incorporated input from State and local stakeholders and Federal agency partners throughout the development of the *FY 2013 SAFECOM Guidance.* The guidance supports OEC's mandate to help administer the Department's responsibilities and authorities relating to the SAFECOM Program[84] and to establish coordinated guidance for Federal grant programs for public safety interoperable communications.[85] Appendix A describes the process, coordination, and input that OEC used to develop Federal recommendations, priorities, policies, technical standards, and best practices included in the *FY 2013 SAFECOM Guidance*.

FY 2013 Recommendations for Stakeholders

OEC conducted outreach to State and local stakeholders and Federal agency partners during the development of the *FY 2013 SAFECOM Guidance*. The following recommendations were consistent across all parties:

- Continue investment in emergency communications planning and coordination
- Sustain current LMR capabilities
- Invest in broadband planning (as opposed to broadband equipment) to help the State prepare for the development and deployment of the NPSBN

OEC included these recommendations in the Message to Stakeholders and reiterated them throughout the *FY 2013 SAFECOM Guidance*.

FY 2013 SAFECOM Priorities

The *FY 2013 SAFECOM Guidance* encourages grantees to invest in projects to sustain current communications capabilities, plan for broadband, and close gaps and shortfalls. To develop the priorities, OEC consulted with stakeholders and assessed the following key issues:

- *FY 2012 SAFECOM* Priorities
- Findings from implementing the NECP Goals
- Input from SAFECOM/ NCSWIC Funding and Grants Working Group
- Feedback from SAFECOM EC/ERC and NCSWIC
- Input from Federal agency partners (DHS/OEC, DHS/FEMA, FCC, NTIA, DOT, DOJ)

The Priorities represent current needs and initiatives that stakeholders and Federal agency partners have recognized as integral to emergency communications and recommended funding in FY 2013.

[84] 6 U.S.C. § 571(c)(2)
[85] 6 U.S.C. § 574

FY 2013 SAFECOM Policies

The *FY 2013 SAFECOM Guidance* includes information on Federal policies and national initiatives affecting emergency communications. OEC developed policy considerations in coordination with Federal agency partners,. The policies include information on Homeland Security Presidential Directives (HSPD), Presidential Policy Directives (PPD), new legislative and regulatory developments, and Federal agency policies and initiatives, including:

- National Preparedness System and PPD-8
- Middle Class Tax Relief and Job Creation Act of 2012
- FCC Narrowbanding Mandate
- Increased Need to Demonstrate Efficiency and Effectiveness of Federal Grant Funding

A key goal of the *FY 2013 SAFECOM Guidance* is to educate grantees about Federal policies and initiatives affecting emergency communications and to encourage investment in projects that support Federal policies and initiatives.

FY 2013 Technical Standards

The *FY 2013 SAFECOM Guidance* includes technical standards that help to ensure Federally-funded investments are compatible and interoperable. In developing the FY 2013 technical standards, OEC:

- Leveraged the technical standards in the *FY 2012 SAFECOM Guidance*
- Consulted Federal technical experts to collect updated information on standards (i.e., new standards that have been approved since the *SAFECOM Guidance* was last published)
- Referred to the Middle Class Tax Relief Job Creation Act of 2012 to incorporate information on required technical standards related to the deployment of the National Public Safety Broadband Network
- Provided guidance to grantees on procurement and ensuring grant-funded purchases are compliant with technical standards
- Coordinated with Federal agency partners to ensure the accuracy and consistency of technical standards and compliance

Working closely with technical experts and Federal agency partners enabled OEC to provide grantees with the most up-to-date information on technical standards for emergency communication purchases and methods for ensuring compliance.

Best Practices

As in previous editions, the *FY 2013 SAFECOM Guidance* includes recommendations and best practices to assist grantees in planning and implementing successful emergency communications projects. OEC collects best practices from stakeholders, Federal agency partners, and presentations provided at the ECPC Grants Focus Group.

Appendix B – Acronym List

AAR	After Action Report
AEL	Authorized Equipment List
AES	Advanced Encryption Standard
ANSI	American National Standards Institute
BSI	Bridging Systems Interface
CAP	Common Alerting Protocol
CASM	Communication Asset Survey and Mapping
CEQR	Council on Environmental Quality Regulations
COML	Communications Unit Leader
COMT	Communications Unit Technician
CONOPS	Concept of Operations
DE	Distribution Element
DES-OFB	Data Encryption Standard-Output Feedback
DHS	Department of Homeland Security
DOJ	Department of Justice
DOT	Department of Transportation
ECPC	Emergency Communications Preparedness Center
EDXL	Emergency Data eXchange Language
EHP	Environmental and Historic Preservation
EMPG	Emergency Management Performance Grants
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Authority
FirstNet	First Responder Network Authority
FOA	Funding Opportunity Announcement
FY	Fiscal Year
GAO	Government Accountability Office
GETS	Government Emergency Telecommunications Service
HAVE	Hospital AVailability Exchange
HSEEP	Homeland Security Exercise and Evaluation Program
HSGP	Homeland Security Grant Program

HSPD	Homeland Security Presidential Directive
IB	Information Bulletin
ICS	Incident Command System
IEEE	Institute of Electrical and Electronics Engineers
IEPD	Information Exchange Package Documentation
ISSI	Inter Radio Frequency Sub-System Interface
kHz	kilohertz
LMR	Land Mobile Radio
LTE	Long Term Evolution
M&O	Maintenance and Operations
MHz	megahertz
MOU	Memorandum of Understanding
MPLS	Multi-Protocol Line Switching
NCSWIC	National Council of Statewide Interoperability Coordinators
NECP	National Emergency Communications Plan
NEP	National Exercise Program
NIST	National Institute of Standards and Technology
NG9-1-1	Next Generation 9-1-1
NIC	National Integration Center
NIEM	National Information Exchange Model
NIMS	National Incident Management System
NIMSCAST	NIMS Compliance Assistance Support Tool
NPSBN	Nationwide Public Safety Broadband Network
NTIA	National Telecommunications and Information Administration
OASIS	Organization for the Advancement of Structured Information Standards
OEC	Office of Emergency Communications
OIC	Office for Interoperability and Compatibility
OMB	Office of Management and Budget
P25	Project 25
P25CAP	P25 Compliance Assessment Program
POETE	Planning, Organization, Equipment, Training, and Exercises

PPD-8	Presidential Policy Directive 8
PSCR	Public Safety Communications Research
P-TAC	Preparedness-Technology, Analysis, and Coordination Center
PTIG	Project 25 Technology Interest Group
RF	Radio Frequency
RFI	Request for Information
RFP	Request for Proposals
RKB	Responder Knowledge Base
RM	Resource Messaging
RUS	Rural Utilities Service
SAA	State Administrative Agency
SAFECOM EC/ERC	SAFECOM Executive Committee/Emergency Response Council
SCIP	Statewide Communication Interoperability Plan
SIGB	Statewide Interoperability Governing Body
SIEC	Statewide Interoperability Executive Committee
SLIGP	State and Local Implementation Grant Program
SME	Subject Matter Expert
SOP	Standard Operating Procedure
SOR	Statement of Requirements
SPOC	State Point of Contact
SPR	State Preparedness Report
STEP	Supporting Technology Evaluation Project
SWIC	Statewide Interoperability Coordinator
THIRA	Threat and Hazard Risk Assessment
TIA	Telecommunications Industry Association
TICP	Tactical Interoperable Communications Plan
TSP	Telecommunications Service Program
UASI	Urban Area Security Initiative
USDA	United States Department of Agriculture
VoIP	Voice over Internet Protocol
WPS	Wireless Priority Service

Appendix C – Emergency Communications Resources

Appendix C provides links to resources referenced in the *FY 2013 SAFECOM Guidance* and additional resources to help grantees develop emergency communication projects and complete Federal grant applications. Grantees are strongly encouraged to visit the SAFECOM website (http://www.safecomprogram.gov) for additional resources.

700 MHz Public Safety Broadband Network

- NTIA Public Safety site: http://www.ntia.doc.gov/category/public-safety
- FirstNet site: http://www.ntia.doc.gov/category/firstnet
- State and Local Implementation Grant: http://www.ntia.doc.gov/other-publication/2013/sligp-federal-funding-opportunity
- State and Local Implementation Grant FAQ: http://www.ntia.doc.gov/other-publication/2013/sligp-frequently-asked-questions
- FCC website: http://www.fcc.gov/encyclopedia/700-mhz-spectrum
- Public Safety Communications Evolution brochure: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=330
- Interoperability Planning for Wireless Broadband: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=331
- Public Safety Communications Research (PSCR) Demonstration Network: http://www.pscr.gov/projects/broadband/700mhz_demo_net/700mhz_ps_demo_net.php

800 MHz Rebanding

- FCC website: http://transition.fcc.gov/pshs/public-safety-spectrum/800-MHz/
- 800 MHz rebanding website: http://www.fcc.gov/pshs/public-safety-spectrum/800-MHz/reconfiguration.html
- 800 MHz Transition Administrator (TA) website: http://www.800ta.org/
- Transition Administrator contact: comments@800TA.org
- FCC Frequently Asked Questions on rebanding: http://transition.fcc.gov/pshs/public-safety-spectrum/800-MHz/reconfiguration-faqs.html

9-1-1 Services

- See the National 9-1-1 Program's website at http://www.911.gov/

Authorized Equipment List (AEL)

- For a list of interoperable emergency communications equipment typically allowed under emergency communication grants, see the list of Interoperable Communications Equipment on the FEMA AEL on the Responder Knowledge Base (RKB) website at: https://www.rkb.us/mel.cfm

Bridging System Interface (BSI)

- The BSI is a VoIP interface between bridging or gateway devices. More information is available at: http://www.safecomprogram.gov/currentprojects/voip/Default.aspx

Broadband

- See 700 MHz Public Safety Broadband Network resources (above)
- See FEMA IB#386, *Clarification on the Use of DHS/FEMA Public Safety Grant Funds for Broadband-Related Expenditures and Investments*, at: http://www.fema.gov/library/viewRecord.do?id=6104
- Standards for Other Broadband Technologies: FCC Tech Topic #11: WiMAX Applications for Public Safety at: http://transition.fcc.gov/pshs/techtopics/techtopics11.html

Broadband Technology Opportunities Program (BTOP)

- See NTIA BTOP site: http://www2.ntia.doc.gov/
- See NTIA Public Safety site: http://www.ntia.doc.gov/category/public-safety

Cost Sharing/Matching Resources

- General guidance on match can be found in Section 3.4 of the *FY 2013 SAFECOM Guidance*
- **NOTE:** Cost-share requirements vary greatly by grant. Grantees should review grant guidance to understand matching requirements, ensure they can meet matching requirements before applying for Federal funds, and consult the funding agency with any questions regarding matching funds.

Data-Related Systems, Standards

- See Section 5.3 in the *FY 2013 SAFECOM Guidance*
- See OASIS at: http://www.oasis-open.org

Emergency Communications System Life Cycle Planning Guide

- See: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=324

Environmental Resources

- See *FY 2013 SAFECOM Guidance*, Section 4.5 - *Additional Requirements for Equipment Purchases*
- For more information on the environmental review process, see: http://ceq.hss.doe.gov/index.html
- **NOTE:** Each agency has its own environmental review process. Grantees should contact their grant officer **as early in the grant process as possible** to understand and ensure compliance with environmental review requirements.
- DHS has posted guidance on its environmental review requirements:
  - FEMA Information Bulletins (IB) on environmental review: Refer to IB# 329, 345, 356, and 371 located at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins#1
  - For questions on EHP for FEMA grants, contact: GPDEHPInfo@fema.gov

Equipment Standards

- For guidance on equipment and equipment standards, see:
  - *FY 2013 SAFECOM Guidance*, Sections 4.5 and 5
  - For a list of interoperable emergency communications equipment typically allowed under grants, see the FEMA AEL on the RKB website at: https://www.rkb.us/melcfm
- See Data-Related Standards (above)
- For Narrowbanding Information, see:
  - FCC Narrowbanding website: http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html
  - Narrowband Tech Topic: http://transition.fcc.gov/pshs/techtopics/techtopics16.html
- See Project 25 (P25) Resources (below)
- Emergency Communications System Life Cycle Planning Guide. See: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=324

Exercise Resources

- For guidance on exercises, see the *FY 2013 SAFECOM Guidance*, Section 4.4
- Exercises conducted with FEMA funds should be managed and executed in accordance with HSEEP
  - HSEEP Guidance can be found at: https://hseep.dhs.gov
  - For questions on HSEEP, email hseep@dhs.gov
- Exercises should be NIMS compliant. More information is available online at the NIC at: http://www.fema.gov/emergency/nims/index.shtm
- The Communications-Specific Tabletop Exercise Methodology at: http://www.safecomprogram.gov/SiteCollectionDocuments/CommunicationsSpecificTabletopExerciseMethodology.pdf
- For NECP Goals, see: http://www.dhs.gov/files/publications/gc_1281645820543.shtm
- For questions on NECP Goals, contact: necpgoals@hq.dhs.gov
- NIMS National Standard Curriculum Training Development Guidance can be found at: http://www.fema.gov/training-0

Federal Communications Commission (FCC) Resources

- See 700 MHz Public Safety Broadband Network Resources (above)
- See 800 MHz rebanding information (above)
- FCC Narrowbanding website: http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html
- For information on licensing fees, see the FCC Fee Filing Guide for the Wireless Telecommunications Bureau at: http://transition.fcc.gov/fees/appfees.html

Federal Emergency Management Agency (FEMA) Grant Page

- http://www.fema.gov/grants

FEMA Information Bulletins

- See: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins

First Responder Network Authority (FirstNet)

- For information on FirstNet, see: http://www.ntia.doc.gov/category/firstnet

Government Accountability Office (GAO)

- See the GAO's report on duplication at: http://www.gao.gov/products/GAO-12-342SP

Grants

- For a list of grants funding emergency communications, see: http://www.safecomprogram.gov/SiteCollectionDocuments/GrantProgramsforSAFECOMWebsite.pdf
- FEMA Grant Page: http://www.fema.gov/grants
- Grants.gov site: http://www.grants.gov
- OMB resources on grants: http://www.whitehouse.gov/omb/grants_default/

Intergovernmental Review

- Executive Order 12372 requires applicants from State and local units of government or other organizations providing services within a State to submit a copy of the application to the State Single Point of Contact (SPOC), if one exists, and if this program has been selected for review by the State. Applicants must contact their State SPOC to determine if the program has been selected for State review.
  - Executive Order 12372 can be referenced at: http://www.archives.gov/federal-register/codification/executive-order/12372.html
  - The names and addresses of the SPOCs are listed on OMB's home page available at: www.whitehouse.gov/omb/grants_spoc

Interoperability Continuum

- See: http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx

Interoperability Planning for Wireless Broadband

- See: www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=331

Land Mobile Radio (LMR), Standards

- See *FY 2013 SAFECOM Guidance*, Section 5.1
- See P25 Resources (below)

Life Cycle Planning

- For guidance on system life cycle planning, see: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=324

Maintenance

- Maintenance and Operations (M&O) may be allowable under some grants. Grantees should consult their funding agency to determine if M&O costs are allowable.
- For guidance on maintenance for FEMA grants only, see IB#336 and IB#348, located at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins

Middle Class Tax Relief and Job Creation Act

- See: http://www.gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf
- See also: http://www.dhs.gov/public-safety-broadband-fulfilling-911-commission-recommendation
- See also: http://www.ntia.doc.gov/category/public-safety

Narrowbanding

- See *FY 2013 SAFECOM Guidance*, Section 3.3
- See FCC Narrowbanding website: http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html
- A Practical Guide to Narrowbanding: http://www.safecomprogram.gov/SiteCollectionDocuments/OECNarrowbandingGuide_Final.pdf
- For information on FCC fees related to Narrowbanding, see: http://transition.fcc.gov/fees/

National 9-1-1 Program

- See the National 9-1-1 Program's website at http://www.911.gov/

National Broadband Plan

- See: http://www.broadband.gov/plan/

National Emergency Communications Plan (NECP)
- See: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf

National Emergency Communication Plan (NECP) Goals
- For NECP Goals, see: http://www.dhs.gov/national-emergency-communications-plan-necp-goals
- For questions on NECP goals, contact necpgoals@hq.dhs.gov

National Exercise Program
- For the NEP at: http://www.fema.gov/national-exercise-program

National Incident Management System (NIMS)
- For NIMS standards, implementation and compliance, NIMSCAST Training Modules, information on Resource Typing, ICS information, Technical Assistance, and more, see the NIMS site at: http://www.fema.gov/national-incident-management-system
- See the ICS Resource Center at: http://training.fema.gov/EMIWeb/IS/ICSResource/index.htm
- For more information on applicability of NIMS training, see: http://www.fema.gov/emergency/nims/FAQ.shtm#item9
- Grantees should review the NIMS requirements on the following site to ensure that all Federally-funded training and exercise activities are NIMS-compliant: http://www.fema.gov/implementation-and-compliance-guidance-stakeholders
- For NIMS-compliant training, see: http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm

National Information Exchange Model (NIEM)
- Information on NIEM can be found at: https://www.niem.gov/Pages/default.aspx
- In addition, NIEM has developed specific guidance for grantees which can be found at: https://www.niem.gov/aboutniem/grant-funding/Pages/implementation-guide.aspx

National Interoperability Field Operations Guide (NIFOG)
- See NIFOG at: http://www.dhs.gov/files/publications/gc_1297699887997.shtm

National Preparedness Goal
- For more information on the National Preparedness Goal, see: http://www.fema.gov/preparedness-1/national-preparedness-goal

National Preparedness Guidelines
- The National Preparedness Guidelines provide guidance to State, local, tribal, and territorial stakeholders in meeting the Nation‘s most urgent preparedness needs. For information on the *National Preparedness Guidelines*, see: http://www.fema.gov/pdf/emergency/nrf/National_Preparedness_Guidelines.pdf

National Preparedness System
- For more information on the National Preparedness System, see: http://www.fema.gov/preparedness-1/national-preparedness-system

Nationwide Public Safety Broadband Network (NPSBN)
- NTIA Public Safety site: http://www.ntia.doc.gov/category/public-safety
- FirstNet site: http://www.ntia.doc.gov/category/firstnet

Next Generation 9-1-1/National Plan for Migrating to IP-Enabled 9-1-1 Systems

- See: http://www.911.gov/

OASIS Emergency Data eXchange Language (Standards for Data-Related Investments)

- For more information on OASIS, see: http://www.oasis-open.org

Office of Emergency Communications (OEC)

- OEC website: http://www.dhs.gov/xabout/structure/gc_1189774174005.shtm
- OEC contact information: oec@hq.dhs.gov
- OEC Guidance documents: http://www.safecomprogram.gov/oecguidancedocuments/Default.aspx
- OEC Technical Assistance Catalog: http://www.publicsafetytools.info/start_index.php

Office of Management and Budget (OMB) Grant Circulars

- OMB provides grant resources on its Grants Management page at: http://www.whitehouse.gov/omb/grants_default/

Performance Measurement

- See OEC's *Communications Interoperability Performance Measurement Guide* at: http://www.safecomprogram.gov/oecguidancedocuments/Default.aspx

Planning Guidance and Resources – OEC Resources on SAFECOM Website

- *Statewide Interoperability Planning Guidebook:* http://www.safecomprogram.gov/statewideplanning/Default.aspx
- *Establishing Governance to Achieve Statewide Communications Interoperability:* http://www.safecomprogram.gov/SiteCollectionDocuments/EstablishingGovernanceGuide.pdf
- *Interoperability Planning for Wireless Brochure*: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=331
- *Regional Intrastate Governance Guide for Emergency Communications:* http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=129
- *Regional Interoperability Communications Plan Template*: http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=327
- *Emergency Communications System Life Cycle Planning Guide:* http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=324
- *Communications Interoperability Performance Measurement Guide:* http://www.safecomprogram.gov/SiteCollectionDocuments/OECPerformanceMeasurementGuide.pdf
- *Formal Agreement and Standard Operating Procedure Template Suite and Reference Library:* http://www.safecomprogram.gov/oecguidancedocuments/webpages/ts.aspx
- *Interoperability Continuum:* http://www.safecomprogram.gov/oecguidancedocuments/continuum/Default.aspx
- *Writing Guides for Memoranda of Understanding (MOU), Standard Operating Procedures (SOP), Request for Proposals (RFP):* http://www.safecomprogram.gov/oecguidancedocuments/Default.aspx

Planning Guidance and Resources – Resources on FEMA Website

- To access your *State Preparedness Report* and State preparedness plans, see your DHS SAA. To find your SAA, go to: http://coop.fema.gov/government/grant/saa/index.shtm
- *State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the National Preparedness Goal,* http://www.fema.gov/fy-2012-homeland-security-grant-program
- *Threat and Hazard Risk Assessment (THIRA):* http://www.fema.gov/library/viewRecord.do?id=5823
- *CPG 101: Developing and Maintaining State, Territorial, Tribal, and Local Government Emergency Plans* (used to develop robust and effective plans): http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf
- The *State Multi-Hazard Mitigation Planning Guidance (Mitigation Planning "Blue Book")* includes guidance for developing a Hazard Mitigation Plan, including the integration of man-made disasters into planning: http://www.fema.gov/library/viewRecord.do?id=3115
- The *National Preparedness Guidelines* are instrumental in guiding State, local, tribal, and territorial stakeholders in meeting the Nation's most urgent preparedness needs. For information on the *National Preparedness Guidelines*, please see: http://www.fema.gov/pdf/emergency/nrf/National_Preparedness_Guidelines.pdf
- *Target Capabilities List*: www.fema.gov/pdf/government/training/**tcl**.pdf

Preparedness-Technology, Analysis, and Coordination (P-TAC) Center: Supporting Technology Evaluation Project (STEP)

- More information on the P-TAC Center and the products and services available to the response community to include STEP can be found at: www.ptaccenter.org

Presidential Policy Directive 8 (PPD-8)

- For more information on PPD-8, see: http://www.dhs.gov/xabout/laws/gc_1215444247124.shtm and http://www.fema.gov/ppd8

Priority Service Programs

- For more information, see: http://gets.ncs.gov/index.html.

Project 25 (P25), Standards for Land Mobile Radio (LMR) Investments

- See the *FY 2013 SAFECOM Guidance*, Section 5.1
- The P25 suite of standards is available at: http://www.tiaonline.org/all-standards/committees/tr-8.
- P25 CAP Compliance Assessment Bulletins for testing requirements found at: http://www.safecomprogram.gov/currentprojects/project25cap/Default.aspx.
- P25 Statement of Requirements: http://www.project25.org/documents/other-documents-of-interest/147-p25-sor-introduction.
- For additional information on P25 information and resources, grantees can register (free of charge) for the PTIG website at: http://www.project25.org/
- For sample procurement language, see *Enhancing Communications Interoperability: Guidelines for Developing Requests for Proposals* at: http://www.safecomprogram.gov/SiteCollectionDocuments/GuidelinesforRFPDevelopmentCW62806.pdf
- For information on the P25 Compliance Assessment Program (CAP), see: http://www.pscr.gov/projects/lmr/p25_cap/p25_cap.php
- Where such equipment is covered in the *Project 25 Compliance Assessment Program Requirements*, it must be tested in accordance with applicable standards and policies of the P25 CAP, and evidence of this testing must be documented through Supplier's Declarations of Compliance and Summary Test Reports that have been posted to http://www.rkb.us

Public Safety Communications Evolution Brochure
- http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=330

Public Safety Communications Research (PSCR) Demonstration Network
- http://www.pscr.gov/projects/broadband/700mhz_demo_net/700mhz_ps_demo_net.php

Public Safety Wireless Broadband Network, Resources
- See 700 MHz Broadband Network Resources above

Regional Guidance
- *Regional Intrastate Governance Guide for Emergency Communications:* http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=129
- *Regional Interoperability Communications Plan Template:* http://www.safecomprogram.gov/library/lists/library/DispForm.aspx?ID=327

Responder Knowledge Base (RKB)
- https://www.rkb.us/

SAFECOM Resources
- The SAFECOM website can be found at: http://www.safecomprogram.gov/default.aspx
- For the most recent *SAFECOM Guidance* and list of grants funding emergency communications, see the SAFECOM website at: http://www.safecomprogram.gov/grant/Default.aspx

State Administrative Agency (SAA)
- The DHS SAA and other State-level contacts can be found at: http://coop.fema.gov/government/grant/saa/index.shtm

State and Local Implementation Grant Program (SLIGP)
- State and Local Implementation Grant: http://www.ntia.doc.gov/other-publication/2013/sligp-federal-funding-opportunity
- State and Local Implementation Grant FAQ: http://www.ntia.doc.gov/other-publication/2013/sligp-frequently-asked-questions

Statewide Communication Interoperability Coordinator (SWIC)
- See *FY 2013 SAFECOM Guidance,* Sections 3.2 and 4.2
- To find your SWIC or SCIP Point of Contact, please contact OEC at oec@hq.dhs.gov
- Establishing Governance to Achieve Statewide Communications Interoperability: http://www.safecomprogram.gov/SiteCollectionDocuments/EstablishingGovernanceGuide.pdf

Statewide Communication Interoperability Plan (SCIP)
- See *FY 2013 SAFECOM Guidance,* Sections 2.2 and 4.2
- For information on SCIPs, see the OEC website at http://www.dhs.gov/files/programs/gc_1225902750156.shtm
- To find your SCIP, please contact your SWIC or SCIP Point of Contact. If you do not know your SWIC or SCIP Point of Contact, please email OEC at oec@hq.dhs.gov

Statewide Interoperability Planning Guidebook:
- http://www.safecomprogram.gov/statewideplanning/Default.aspx

Supporting Technology Evaluation Project (STEP)

- More information on the P-TAC Center and the products and services available to the response community to include STEP can be found at: www.ptaccenter.org

T-Band

- The Middle Class Tax Relief and Job Creation Act of 2012 requires that systems operating in the T-band migrate within 11 years of enactment, by 2023. See: http://www.gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf
- For an overview of T-Band issues, see: http://www.npstc.org/TBand.jsp

Target Capabilities List (TCL)

- www.fema.gov/pdf/government/training/tcl.pdf

Technical Assistance Catalog (2012)

- http://www.publicsafetytools.info/start_index.php

Threat and Hazard Risk Assessment (THIRA)

- DHS requires HSGP and EMPG grantees to complete the THIRA, and to use the THIRA and a capability estimation process reported through the State Preparedness Report to inform Statewide Homeland Security Strategies, State Preparedness Plans, Emergency Operations Plans, and future investments. Grantees should participate in the development of the THIRA, and engage with State-level planners to integrate communications needs into statewide plans and ensure that emergency communications needs are considered for funding. For more information, see: FY 2012 HSGP Funding Opportunity. Announcement at: http://www.fema.gov/fy-2012-homeland-security-grant-program#0.
- See also IB#385 THIRA Requirement, and FEMA IB #385(a) *Clarification of the THIRA Requirement* at: http://www.fema.gov/grants/grant-programs-directorate-information-bulletins#1
- See the THIRA Toolkit: http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5825

Training Resources

- For guidance on emergency communications training, see *FY 2013 SAFECOM Guidance*, Section 4.3
- See NIMS Resources above
- Approved Federal Sponsored Course Catalog: http://www.firstrespondertraining.gov
- National Preparedness Directorate Online Course Catalog (OCC): http://training.fema.gov/occ/
- FEMA Training Catalogs: https://www.firstrespondertraining.gov/content.do?page=training

Voice-over-Internet Protocol (VoIP) Standards

- For guidance on VoIP, see *FY 2013 SAFECOM Guidance*, Section 5.2
- When purchasing bridging or gateway devices that have a VoIP capability to provide connectivity between LMR systems, grantees should see standards posted at: http://www.safecomprogram.gov/currentprojects/voip/Default.aspx

WiMAX

- For information onWiMAX applications for Public Safety, see: http://transition.fcc.gov/pshs/techtopics/techtopics11.html