



Office of Emergency Communications:

Fiscal Year 2014

SAFECOM Guidance
on Emergency Communications Grants



Homeland
Security

A Message to Stakeholders

On behalf of the Office of Emergency Communications (OEC), I am pleased to present the *Fiscal Year 2014 SAFECOM Guidance on Emergency Communications Grants (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 2014 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 concepts and guidance within Presidential Policy Directive 8, to include engaging the whole community in preparedness activities. 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 2014 SAFECOM Guidance* also encourages grantees to participate, support, and invest in planning activities that will help States prepare for the deployment of the Nationwide Public Safety Broadband Network (NPSBN) as well as share essential user needs and requirements prior to the State's consultation with the First Responder Network Authority. At the same time, the *FY 2014 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, while planning for the deployment of the NPSBN.

The *FY 2014 SAFECOM Guidance* leverages findings from various assessment efforts, exercises, trainings, and after action reports to inform FY 2014 funding priorities and related activities. Grantees are encouraged to target funding toward priorities and activities that address critical emergency communications priorities identified by the *National Emergency Communications Plan*.

As in previous years, OEC developed the *FY 2014 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 Grants Focus Group, to ensure that emergency communications policy is coordinated and consistent across the Federal Government. OEC encourages grantees to consult the *FY 2014 SAFECOM Guidance* when developing emergency communications investments, and to direct any questions to my office at: oechq@hq.dhs.gov.

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DHS Office of Emergency Communications

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1. Introduction

The Department of Homeland Security (DHS) is mandated to administer responsibilities and authorities relating to the SAFECOM Program. Within DHS, the Office of Emergency Communications (OEC) is responsible for developing a coordinated guidance for Federal grant programs for public safety interoperable communications.¹ As a result, OEC develops the annual *SAFECOM Guidance on Emergency Communications Grants (SAFECOM Guidance)* for entities applying for Federal financial assistance for emergency communications projects. The *National Emergency Communications Plan (NECP)* defines emergency communications as the means and methods for exchanging communications and information for successful incident management.² 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.³ The *SAFECOM Guidance* aims to ensure that emergency communications standards and policies across Federal grant programs provide a consistent approach to improving emergency communications nationwide.

SAFECOM is a public safety-driven communications program and OEC develops policy, guidance, and future efforts by drawing on SAFECOM member expertise and recommendations. The Office for Interoperability and Compatibility (OIC) within DHS' Science and Technology Directorate supports SAFECOM-related research, development, testing, evaluation, as well as the acceleration of standards. 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, and territorial governments, to improve emergency communications. Additionally, OEC consulted members of the Emergency Communications Preparedness Center Grants Focus Group to better coordinate and develop a common guidance for Federal grant programs that support emergency communications.⁴ Together, Federal agency partners and the SAFECOM Executive Committee (EC) and Emergency Response Council (ERC) coordinate on emergency communications policy and standards to ensure projects are compatible, interoperable, and most importantly, meet the needs of end-users.

1.1 Purpose of the FY 2014 SAFECOM Guidance

The *FY 2014 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

¹ 6 U.S.C. § 571(c)(2) and 6 U.S.C. § 574

² DHS is updating the NECP in 2014. For more information on the NECP, see: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf.

³ 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.

⁴ The Emergency Communications Preparedness Center Grants Focus Group is comprised of Federal grants officers, program administrators, and communications experts representing the 14 Federal agencies that participate in the ECPC.

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The *SAFECOM Guidance* is designed to promote and align with the national emergency communications goals established in the NECP. The recommendations within the *SAFECOM Guidance* 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).⁵ Best practices and technical standards located within the *SAFECOM Guidance* help ensure that Federally-funded emergency communications investments are interoperable and support the national policies. 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 carefully to ensure the activities they propose are eligible, and that all standards, terms, and conditions required by the program are met.⁶

1.2 Report Methodology

OEC consulted with State and local stakeholders and Federal agency partners to develop the *FY 2014 SAFECOM Guidance* to include the priorities, recommendations, and technical standards. The priorities within this *Guidance* represent current needs and initiatives that stakeholders and Federal agency partners have recognized as integral to emergency communications and recommended to continue funding in FY 2014. Specifically, OEC consulted:

- SAFECOM EC and ERC⁷
- National Council of Statewide Interoperability Coordinators (NCSWIC)
- Emergency Communications Preparedness Center (ECPC)
- DHS Office of the Chief Financial Officer (OCFO)
- Federal Emergency Management Agency (FEMA)
- Federal Communications Commission (FCC)
- National Telecommunications and Information Administration (NTIA)
- U.S. Department of Transportation (DOT)
- U.S. Department of Justice (DOJ)
- U.S. Department of Agriculture (USDA)
- U.S. Department of the Interior (DOI)
- National Institute of Standards and Technology (NIST)

Working closely with technical experts and Federal agency partners, the *FY 2014 SAFECOM Guidance* outlines the most up-to-date information on technical standards for emergency communications purchases and methods for ensuring compliance and consistency. These technical standards help to ensure Federally-funded investments are compatible, interoperable, and compliant with the *Middle Class Tax Relief Job Creation Act of 2012*.

⁵ For information on SCIPs, see the OEC website at: http://www.dhs.gov/files/programs/gc_1225902750156.shtm.

⁶ For the purposes of this document, “grant guidance” may include Funding Opportunity Announcements, Grant Notices, Grant Applications, and other formal notices of grants and Federal financial assistance programs.

⁷ For a list of SAFECOM members, to include the National Public Safety Telecommunications Council, see SAFECOM’s website at: <http://www.safecomprogram.gov/links.html>.

1.3 Use of FY 2014 SAFECOM Guidance

The *FY 2014 SAFECOM Guidance* should be used during the planning, development, and implementation of emergency communications projects and in conjunction with other planning documents. Before proposing projects for funding, prospective applicants are encouraged to read Federal and State preparedness documents such as statewide plans and reports (i.e., SCIPs, State Preparedness Report [SPR]), and the *FY 2014 SAFECOM Guidance* to ensure projects support, and do not contradict, Federal, State, local, tribal, and territorial plans for improving emergency communications.⁸ Specifically, grantees should:

- Ensure alignment with the goals, objectives, and recommendations of the NECP
- 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 statewide plans and assessments such as the SCIP, SCIP Annual Progress Report, SPR, and broadband plan
 - Comply with recommendations and technical requirements in the *FY 2014 SAFECOM Guidance*

For additional resources that are available to grantees, refer to Table 1 below:

Table 1. Essential Resources for Emergency Communications Grantees

| Resource | Description |
|-------------|---|
| NECP | The NECP is the only strategic national emergency communications plan that promotes communication and sharing of information across all levels of government, jurisdictions, disciplines, and organizations for all threats and hazards, as needed and when authorized. It provides information and guidance to those that plan for, coordinate, invest in, and use communications to support response operations. Grantees are encouraged to read the NECP to understand the national emergency communications strategy, and to ensure that investments support the goals and objectives of the Plan. In addition, grantees are encouraged to review NECP supplemental materials such as assessments, annual progress reports, and implementation documents. The NECP can be found at: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf . |
| 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 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. To find the SWIC for your State, please contact OEC at: oeq@hq.dhs.gov . |
| SWIC | The SWIC serves as the State single point of contact for interoperable communications and implements the SCIP in coordination with the Statewide Interoperability Governing Body (SIGB). Grantees are strongly encouraged to coordinate projects with the SWIC to ensure that projects support, and do not |

⁸ There are several documents that grantees should review, including but not limited to, Presidential Policy Directive 8, Threat and Hazard Identification and Risk Assessments (THIRA), the SPR, and SCIPs.

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| | |
|---|---|
| | contradict, statewide efforts to improve emergency communications. To find the SWIC for your State or territory, please contact OEC at: oeq@hq.dhs.gov . |
| SAFECOM Website | The SAFECOM website provides information and resources for grantees developing emergency communications projects. For the most recent <i>SAFECOM Guidance</i> 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/ . Of note, Federal awards issued on or after December 26, 2014, must adhere to the <i>Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards</i> which was issued on December 26, 2013. Grantees should reference agency-specific Funding Opportunity Announcements to determine applicable <i>Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards</i> . Additional information and the dates for implementation can be found on the Council of Financial Assistance Reform's (COFAR) website at: https://cfo.gov/cofar/ . |
| FirstNet State Single Point of Contact | The <i>Middle Class Tax Relief and Job Creation Act of 2012</i> mandates that each Governor designate a single officer or government body to engage the First Responder Network Authority (FirstNet) and serve as the coordinator of the State and Local Implementation Grant Program (SLIGP) funds. Grantees should consult with the FirstNet Single Point of Contact (POC) for their State or territory when engaging in public safety broadband network activities. To find the FirstNet Single POC for your State or territory, please refer to: http://www.ntia.doc.gov/sligp/sligp-awards . |

1.4 Key Changes and Updates

This section highlights key changes to the *FY 2014 SAFECOM Guidance*:

- **Emergency Communications Priorities (Section 2).** This section reviews the FY 2014 priorities including: Leadership and Governance, Statewide Planning for Emergency Communications, Emergency Communications Training and Exercises, Activities that Enhance Operational Coordination, and Standards-based Equipment.⁹ The priorities have not changed significantly from FY 2013; however, they have been updated to address broadband planning policies and activities, as well as the revised NECP.
- **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 updated to address remaining gaps from previous NECP assessments, as well as new NECP recommendations.

⁹ Please note that Priority 4 has been renamed from “Other Integral Emergency Communications Activities” to “Activities that Enhance Operational Coordination.”

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

OEC is responsible for ensuring that grant guidelines and priorities relating to interoperable emergency communications are coordinated and consistent with the goals and recommendations in the NECP.¹⁰ In support of this mandate, the *FY 2014 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); Presidential Policy Directive 8 (PPD-8); and the NECP. In FY 2014, 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: Activities that Enhance Operational Coordination
- Priority 5: Standards-Based Equipment

2.1 Priority 1: Leadership and Governance

Strong leadership and governance structures are essential to effective decision-making, coordination, and planning for emergency communications. Such 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 priorities, objectives, strategies, and tactics during response operation.¹¹ In FY 2014, grantees are encouraged to invest in emergency communications leadership and governance structures for coordinating both LMR and broadband planning initiatives. The SWICs, along with the 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 and territories should work to ensure that the SWIC or SWIC-equivalent position and the activities of the SIGB or SIEC are fully funded. Tribal, regional, and local entities are also encouraged to fund leadership and governance activities.

Investment in leadership and governance activities help improve response efforts by ensuring that emergency communications needs are assessed and addressed, LMR capabilities are maintained, and emergency communications representatives participate in State-level response and broadband planning meetings.

To support this priority, grantees should target funding toward:

- Sustaining the SWIC position
- Building and expanding governance structures to:

¹⁰ 6 U.S.C. §574

¹¹ See the *National Incident Management System (NIMS) National Standard Curriculum Training Development Guidance* at: <http://www.fema.gov/national-incident-management-system>.

- Include and coordinate with emergency communications leaders (e.g., FirstNet State Single POC, 9-1-1 leaders, Regional Emergency Communications Coordination Working Group [RECCWG], utilities commissions) and representatives from multiple agencies, jurisdictions, disciplines, levels of government, tribes, rural areas, subject matter experts, and private industry to share information on emergency communications and initiatives
- Integrate emergency communications leadership and governance structures into broader statewide planning efforts (e.g., statewide broadband planning activities, Senior Advisory Committee, THIRA, 9-1-1 planning efforts) to ensure emergency communications needs are represented¹²
- Conduct outreach and education to continually assess and address user needs

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. Updating plans and standard operating procedures (SOP) to address emergency communications gaps, new technologies, and stakeholder needs helps to improve emergency communications and response across the whole community. This continuous and comprehensive planning has enabled States to effectively identify, prioritize, and coordinate to ensure that proposed investments support statewide planning priorities.

In FY 2014, States and territories should continue to target funding toward planning activities, including updates of statewide plans (e.g., SCIPs, broadband plans). The goal of this priority is to ensure that emergency communications needs are continually assessed and integrated into State-level risk assessments and preparedness plans. Stakeholders are encouraged to target FY 2014 funding toward planning, stakeholder outreach, assessment of user needs, and other activities that will help to engage the whole community in emergency communications planning initiatives.

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

- Update SCIPs to:
 - Incorporate PPD-8 and DHS whole community concepts¹³
 - Address findings and gaps identified in After-Action Reports (AAR) from real-world incidents and planned exercises, NECP assessment findings and recommendations, other State-level preparedness reports and assessments (e.g., THIRA, SPR)
 - Describe strategic broadband planning activities and initiatives in preparation for the future deployment of the NPSBN

¹² FEMA encourages States to leverage existing governing bodies and to establish a Senior Advisory Committee, comprised of specific State-level representatives, including the SWIC and SIGB, who work together to coordinate grant resources.

¹³ Per the *National Preparedness Goal*, whole community is formally defined as, “A focus on enabling the participation in national preparedness activities of a wider range of players from the private and nonprofit sectors, including nongovernmental organizations and the general public, in conjunction with the participation of Federal, State, and local governmental partners in order to foster better coordination and working relationships.”

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- Identify and address FCC directives affecting current or planned public safety communications systems (e.g., narrowband mandate, T-Band migration, systems operating in the 700 megahertz [MHz] public safety broadband spectrum, 800 MHz rebanding)
- Support statewide emergency communications and preparedness planning efforts through the allocation of funding to the following planning activities:
 - Conduct/attend planning meetings¹⁴
 - Engage the whole community in emergency communications planning, response, and risk identification
 - Develop risk and vulnerability assessments (e.g., cyber, THIRA)
 - Integrate emergency communications assets and needs into State-level plans (e.g., SCIP, SPR, broadband plans), as appropriate
 - Coordinate with SWIC, State Administrative Agency (SAA),¹⁵ and State-level planners (e.g., FirstNet State Single POC, 9-1-1 planners, utilities commissions) to ensure proposed investments align to statewide plans (e.g., SCIP, State broadband deployment plan) and comply with technical requirements

2.3 Priority 3: Emergency Communications Training and Exercises

Through its exercise and assessment work, DHS has found that jurisdictions are better able to respond to emergencies due in part to regular training and exercises. Training and exercising help response personnel understand their communications roles and responsibilities during an emergency, as well as the processes for working with other agencies. Further, as communications technologies continue to evolve and the NPSBN is deployed, the need for training and exercises becomes even greater to ensure personnel are proficient in using existing and new technologies.

In FY 2014, grantees should continue to invest in emergency communications-related training and exercises to address gaps identified in response and recovery operations. Grantees are encouraged to participate in training and exercises at all levels of government that will better assist jurisdictions to prepare for disasters and identify, assess, and address capability gaps.¹⁶

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] and the ICS Communications Unit such as Communications Unit Leader [COML] and Communications Technician [COMT])¹⁷
- Exercises that support and demonstrate the adoption, implementation, and use of the NIMS concepts and principles

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>. The State Single POC for statewide broadband activities can be found at: <http://www.ntia.doc.gov/sligp/sligp-awards>.

¹⁶ See Federal standards for training set through NIMS, which can be found at: <http://www.fema.gov/emergency/nims/>.

¹⁷ 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>.

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- Development of SOPs and plain language protocols
- State, regional, or national level exercises to validate plans and procedures
- Training and exercises on new and existing systems, equipment, and SOPs
- Assessment and update of training curriculums and exercise criteria to reflect changes in the operating environment

2.4 Priority 4: Activities that Enhance Operational Coordination

There has been significant improvement in capabilities at the State and local levels resulting in the ability of jurisdictions to more effectively coordinate communications resources and services during emergencies. This includes the integration of capabilities, resources, and personnel from across the whole community. As incidents escalate, communications resources must be able to expand rapidly to meet responders' needs. This requires States and territories to ensure they have an understanding of the communications resources to which they own or can access, as well as follow the appropriate procedures to request and deploy them to the locations where they are most needed.

In FY 2014, grantees are encouraged to update the inventories of their communications assets and share the information within their State and with neighboring States that are most likely to request support during emergencies or events. This can be achieved by working with SWICs to update their inputs to the Next Generation Communication Assets Survey and Mapping (CASM NextGen) tool—a web-based tool that assists public safety agencies to collect and visualize data, and assess inter-agency interoperability based on communications assets and interoperability methods. CASM NextGen can also help grantees identify gaps in capabilities and to target funding toward those gaps. In addition, grantees must continue to implement NIMS ICS principles during all emergencies.

To support this priority, grantees should target funding toward:

- Ensuring inventories of emergency communications resources are updated and comprehensive
- Advancing projects that promote assessment of communications assets, asset coordination, and resource sharing (e.g., CASM NextGen)
- Conducting risk and vulnerability assessments (e.g., cyber, THIRA)
- Developing, integrating, or implementing SOPs, including Incident Action Plans and ICS Form 205 Incident Radio Communications Plans
- Implementing projects that promote regional, intra- and inter-State collaboration
- Inventorying and typing of resources and other activities that strengthen resilience and provide backup communications solutions (e.g., radio caches)
- Addressing needs in the SCIP Annual Progress Report, AARs, NECP assessments, the SPR, or statewide broadband plans
- Supporting communications initiatives that engage the whole community, including outreach and implementation of the *National Preparedness Goal*

2.5 Priority 5: Standards-based Equipment

In FY 2014, grantees should continue to invest in equipment that is standards-based to enable interoperability between agencies and jurisdictions, regardless of vendor. 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.

Grantees are strongly encouraged to invest in equipment that will help to sustain and maintain current LMR capabilities as requirements and standards for broadband are under development. With the creation of the NPSBN, many grantees may be interested in seeking funding for broadband-related investments or dual-use equipment.¹⁸ However, the design and deployment of the NPSBN are still under consideration by FirstNet and this includes determining eligible costs for NPSBN-related projects. Additionally, States and territories are still in the process of planning for the deployment of the NPSBN. Therefore, grantees are strongly encouraged to participate in community outreach, planning, and gathering user requirements. Grantees interested in investing in broadband-related projects should coordinate with the FirstNet State Single POC and the SWIC early in the project development process to ensure that proposed projects comply with statewide broadband plans, meet FirstNet requirements, and are allowable under the program.

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

- Sustain and maintain current LMR capabilities
- Ensure standards-based Project 25 (P25) compliant LMR equipment for mission critical voice communications¹⁹
- Support planning efforts for the deployment of the NPSBN while ensuring compliance with statewide plans and FirstNet requirements²⁰
- Meet FCC and FirstNet spectrum requirements²¹
- Sustain backup solutions (e.g., backup power, portable repeaters, satellite phones)

Grantees are encouraged to improve their understanding of and preparations for the security risks associated with the use of Internet Protocol (IP)-based emergency communications systems. Cybersecurity is becoming a key consideration for public safety officials as new these technologies are integrated into their operations. This will require the public safety community to implement effective strategies to enhance the resiliency of cyber and IP-based infrastructures and safeguard private and sensitive information transmitted and stored by connected systems devices.²²

¹⁸ Equipment that can be used on current LMR systems or configured for future broadband use.

¹⁹ For more information on P25 requirements, see: <http://www.project25.org/>.

²⁰ FirstNet is in the process of developing technical requirements for the NPSBN. Grantees interested in investing in broadband should consult the FirstNet State Single POC to ensure the project supports the statewide plan to deploy broadband, and supports any requirements defined by FirstNet.

²¹ Grantees should consult with FCC as there have been several changes to the public safety spectrum band, such as the narrowbanding mandate, 800 MHz reconfiguration, and changes to the 700 MHz public safety broadband spectrum.

²² In February 2014, NIST released Version 1.0 of the *Framework for Improving Critical Infrastructure Cybersecurity*. The document, created through collaboration between the government and the private sector, is a voluntary risk-based approach to

3. Before Applying

Before applying for Federal funds for emergency communications, applicants should:

- Review the SCIP
- Coordinate with the SWIC or SWIC-equivalent, and with the FirstNet State Single POC for broadband-related investments
- Recognize issues affecting emergency communications grants
- Understand Federal grant requirements and restrictions

3.1 Review the SCIP

In addition to developing their SCIPs, OEC requests that each State and territory submit the SCIP Annual Progress Report to document progress the State or territory has made towards implementing its SCIP. The SCIP Annual Progress Reports includes information on accomplishments, interoperability gaps, as well as current and future strategic initiatives for improving interoperability. Applicants should describe in grant applications how projects align to needs identified in the SCIP or SCIP Annual Progress Report, or in statewide broadband plans.

3.2 Coordinate with the SWIC

To ensure that projects are compatible, interoperable, and support statewide plans and strategies, applicants should consult the appropriate statewide leaders or entities prior to developing projects for funding.²³ The SWIC or SWIC-equivalent in a State is responsible for implementing the SCIP and for ensuring that projects support, and do not hinder, current statewide efforts to improve emergency communications.²⁴ The State Single POC is responsible for engaging with FirstNet in support of planning activities for the deployment of the NPSBN. Applicants should also consult the SIGB or SIEC, as they serve as the primary steering group for the statewide interoperability strategy. Additionally, applicants should consult any subject matter experts (SME) serving on the SIGB or SIEC such as broadband SMEs, chief information officers, representatives from utilities, or legal and financial experts. The appropriate stakeholders within State, local, tribal, and territorial governments and other regional entities established to improve emergency communications should also be consulted to ensure that projects:

- Align to needs identified in SCIP, statewide broadband plans, and other communications plans (e.g., NECP, Tactical Interoperable Communications Plans [TICP]) or to gaps identified in AARs from planned exercises or actual events
- Are compatible with existing equipment and systems, where equipment is involved

cybersecurity that uses industry guidelines to help organizations manage cyber risks to critical infrastructure. For more information, see: <http://www.nist.gov/cyberframework/upload/cybersecurity-framework-021214-final.pdf>.

²³ Some States require grantees and sub-grantees to coordinate grant submissions with FirstNet State Single POC or the SAA. Grantees should coordinate with the SWIC during project development, and consult FirstNet's State Single POC or SAA on grant submissions, if required.

²⁴ Federal grant managers can include language in Funding Opportunity Announcements or in individual grant agreements to require or encourage coordination with statewide emergency communications leaders. Additionally, some programs require applicants to attach a letter of project support from these leaders.

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- Promote shared, standards-based systems (e.g., P25 compliant)
- Meet FCC spectrum requirements for public safety systems

3.3 Recognize Issues Affecting Federal Emergency Communications Grants

Applicants should be aware of evolving Federal programs, policies, and initiatives affecting emergency communications grants in FY 2014. Key issues with potential impacts on Federal emergency communications grants may include:

- Developments related to the planning and deployment of the NPSBN
- PPD-8 to include the *National Preparedness Goal* and THIRA
- FCC spectrum initiatives affecting public safety
- Continued reduction and streamlining of grant programs
- Increased need to demonstrate efficiencies and effectiveness of Federal grant funding

Developments in Broadband

In February 2012, the *Middle Class Tax Relief and Job Creation Act* was signed into law significantly affecting Federal broadband policies.²⁵ 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 SLIGP²⁶

NTIA has awarded funding to each State and territory under the SLIGP to plan for engagement with FirstNet in preparation for the deployment of the NPSBN. FirstNet is still identifying a network architecture, technical and user requirements, spectrum access policies, and deployment plans. While entities may want to pursue funding for broadband equipment and systems, there are no assurances that projects will comply with FirstNet requirements and integrate into the NPSBN.²⁷ Therefore, grantees are strongly advised to delay acquisition of long-term evolution (LTE) equipment until there is further guidance from FirstNet on technical requirements and to continue to target funding toward planning activities (e.g., community outreach and education, documenting user needs) and support statewide planning for broadband and other advanced technologies.²⁸ This includes:

²⁵ See: <http://www.ntia.doc.gov/category/public-safety>.

²⁶ For information on the Grant, see: <http://www.ntia.doc.gov/other-publication/2013/sligp-federal-funding-opportunity>.

²⁷ There are certain entities that have approval from FirstNet to proceed with broadband acquisition and deployment. These entities have been granted spectrum access and permission to proceed with planned broadband projects funded under the Broadband Technology Opportunities Program (BTOP). For more information on these projects, please contact OEC at: oecc@hq.dhs.gov.

²⁸ 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

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- Attending statewide broadband planning meetings
- Implementing activities that will help to expand or enhance existing governance structures and integrate these governance structures into State-level broadband planning
- Assisting in the update of the SCIP to incorporate high-level broadband goals and initiatives, and development of a statewide broadband plan

Applicants interested in investing Federal funds in broadband-related projects should consult the Federal granting agency to understand all requirements and restrictions impacting broadband investments. Applicants should also consult with FirstNet during the development of the application to ensure the entity can secure a leasing agreement to operate in the public safety spectrum. Applicants should also continue to monitor current Federal actions affecting broadband and 9-1-1 programs funded through the Act.²⁹ Additionally, applicants should 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 have 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 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 to ensure emergency communications projects are prioritized by States and territories. Applicants are encouraged to:

- Coordinate projects with neighboring jurisdictions and multiple agencies
- Develop regional, multi-jurisdictional, multi-disciplinary, and cross-border projects to not only promote greater interoperability across agencies, but also to pool grant resources, facilitate asset-sharing, and eliminate duplicate purchases³⁰
- Leverage assessment data to develop strong statements of need that can be shared with State leaders responsible for prioritizing projects for funding³¹
- Identify additional sources of funding for emergency communications improvements³²

communications; 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 (NG 9-1-1), and Bridging System Interface (BSI).

²⁹ 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.

³⁰ 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.

³¹ 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.

³² For additional sources of funding, see the FY 2014 List of Grants Funding Emergency Communications posted to the SAFECOM website at: <http://www.safecomprogram.gov/grant/Default.aspx>.

Spectrum Issues

The FCC and FirstNet authorize public safety entities to use specific spectrum bands to operate emergency communications systems. Grantees seeking Federal funds for communications projects should be aware that there are several Federal initiatives and actions affecting spectrum use for public safety entities. Grantees should review the following spectrum issues, confirm that emergency communications projects support Federal regulatory requirements and initiatives, and consult the appropriate State Single POC and the regulatory agency (i.e., FCC or FirstNet) early in the project development process to ensure the entity and the project will have authority to operate in the desired spectrum, once complete. Key spectrum-related issues are described below:

- **Narrowbanding.**³³ The FCC mandated that all non-Federal public safety LMR licensees operating between 150 and 512 MHz and using 25 kilohertz (kHz) bandwidth voice channels move to 12.5 kHz voice channels by January 1, 2013. While the deadline has passed, grantees are encouraged to review the FCC guidance on narrowbanding, consult with the SWIC and the FCC on narrowbanding issues, and continue allocating grant funds (where allowable) to activities that will ensure compliance with the FCC narrowband mandate.³⁴³⁵
- **800 MHz Reconfiguration (Rebanding).**³⁶ The FCC ruled that parts of the 800 MHz private radio band shared by public safety and industry must be reconfigured to eliminate interferences. The 800 MHz reconfiguration continues in areas along the U.S.-Mexico border and will separate spectrum use by public safety systems and commercial cellular wireless networks within the 800 MHz band. Public safety entities operating in affected border areas should consult the SWIC, FCC, and work with the independent 800 MHz Transition Administrator who is responsible for overseeing the reconfiguration process and for providing resources for entities affected by the rebanding.
- **T-Band Migration.** The *Middle Class Tax Relief and Job Creation Act of 2012* authorized the future auction of the 470–512 MHz ultra high frequency band, referred to as the T-Band. Several large urban areas use the T-Band for public safety communications.³⁷ The Act requires those licensees to migrate from the T-Band to other, unspecified spectrum, within nine years (i.e., by 2021). Grantees seeking funding for improvements to T-Band systems should consult the SWIC early in the project

³³ For more information on narrowbanding, see: <http://transition.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html>.

³⁴ See: “Guidance for licensees for FCC’s narrowband operation requirement” at: <http://www.fcc.gov/document/guidance-licensees-fccs-narrowband-operation-requirement>. Grantees with questions on narrowbanding may contact the FCC at: narrowbanding@fcc.gov.

³⁵ Current FCC rules require 700 MHz public safety licensees to migrate from a 12.5 kHz voice efficiency standard to a 6.25 kHz voice efficiency standard by December 31, 2016. FCC also established December 31, 2014, as an interim deadline for manufacturers to cease marketing, manufacture, or import of 700 MHz narrowband equipment not capable of operating at 6.25 kHz efficiency. The interim date also serves as the deadline after which applicants will no longer be allowed to apply for new 12.5 kHz bandwidth systems.

³⁶ For more information on 800 MHz reconfiguration, see: <http://www.800ta.org/>.

³⁷ Entities operating in the T-Band include: Boston (MA), Chicago (IL), Dallas/Ft. Worth (TX), Houston (TX), Los Angeles (CA), Miami (FL), New York City (NY), Philadelphia (PA), Pittsburgh (PA), San Francisco/Oakland (CA), Washington DC/Maryland/Virginia.

development process to ensure the project supports statewide or regional plans for improving emergency communications.

- **700 MHz Public Safety Broadband Spectrum.**³⁸ The *Middle Class Tax Relief and Job Creation Act of 2012* authorized the establishment of the NPSBN, dedicated broadband spectrum for its users, and named FirstNet as the single licensee for the combined 700 MHz public safety and D Block spectrum. As a result, some grantees operating in the 700 MHz public safety band may need to migrate from the band when the spectrum is cleared for NPSBN use. Grantees operating in the 700 MHz public safety broadband spectrum should consult the FirstNet State Single POC and the SWIC during project development to ensure that projects support the statewide plan for broadband deployment in the 700 MHz public safety broadband spectrum.

In general, grantees should consult with the regulatory agency (e.g., FCC) or with the appropriate State-level points of contact (e.g., SWIC, FirstNet State Single POC) when developing emergency communications projects to ensure entities are in compliance with Federal spectrum initiatives and regulations, and projects will have authority to operate in the designated spectrum.³⁹ To assist State, local, tribal, and territorial levels of government, many grants that fund interoperable communications equipment allow grant funds to be used for spectrum-related activities,⁴⁰ including:

- Identification, assessment, coordination, and licensing of new spectrum resources
- Development and execution of spectrum migration plans
- Assessment of current communications assets, services, and capabilities
- Training associated with systems migration to new spectrum allocations
- Replacement of non-compliant communications equipment and services
- Acquiring/upgrading tower sites and facilities needed to comply with spectrum migration⁴¹
- Reprogramming existing equipment to comply with spectrum migration

Presidential Policy Directive – 8

Signed by the President in March 2011, PPD-8, *National Preparedness*, is aimed at strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the Nation. It consists of four main components: the *National Preparedness Goal*; National Preparedness System; *National Preparedness Report*; and the Campaign to Build and Sustain Preparedness. The directive emphasizes that national preparedness is the shared responsibility of the whole community.⁴²

³⁸ The public safety broadband spectrum band is 763-768 MHz and 793-798 MHz.

³⁹ Contact the FCC's Public Safety Homeland Security Bureau at pshsbinfo@fcc.gov and FirstNet at outreach@firstnet.gov.

⁴⁰ 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/>.

⁴¹ Some Federal grants do not allow construction or ground-disturbing activities. Consult the grant officer on these activities.

⁴² For more information on PPD-8, see: <http://www.dhs.gov/presidential-policy-directive-8-national-preparedness>.

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The National Preparedness System is the methodology through which the *National Preparedness Goal* is implemented. The System consists of six major elements:

- Identifying and assessing risk
- Estimating the level of capabilities needed to address those risks
- Building or sustaining the required levels of capability
- Developing and implementing plans to deliver those capabilities
- Validating and monitoring progress
- Reviewing and updating efforts to promote continuous improvement

Complex and far-reaching threats and hazards require the whole community to integrate preparedness efforts in order to build, sustain, and deliver the core capabilities and achieve the desired outcomes identified in the *National Preparedness Goal*. The components of the National Preparedness System provide a consistent and reliable approach to support decision-making, resource allocation, and measure progress toward these outcomes.

As a result, many grants that fund emergency communications now require grantees to engage the whole community in planning. It is expected that FY 2014 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 Goal* through their involvement in the completion of annual THIRA submissions. To further the intent of PPD-8, 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)
- Describe their whole community approach in grant applications
- Participate in broader statewide planning initiatives (e.g., response planning, broadband planning, THIRA, resource allocation workshops) 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.⁴³ In FY 2014, grantees will be required to continue meeting grant reporting requirements, including the submission of project-level information, if applicable, performance measurement data, increased financial reporting, and progress reports.

⁴³ See the Government Accountability Office's report on duplication at: <http://www.gao.gov/products/GAO-12-342SP>.

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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 performance measures 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 assessments) to help measure performance and demonstrate how gaps in capabilities will be/were addressed through the use of Federal grant funding.

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,⁴⁴ including:

- **Environmental Planning and Historic Preservation (EHP) Compliance.** 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.⁴⁵

⁴⁴ 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.

⁴⁵ National Integration Center (NIC) has advised State, local, tribal, and territorial 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>.

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- **SPR Submittal.** Section 652(c) of the *Post-Katrina Emergency Management Reform Act of 2006* (Public Law 109-295), 6 U.S.C. §752(c), requires any State that receives Federal preparedness assistance to submit an SPR to FEMA. Grantees should consult with the SAA to ensure that the most recent SPR has been submitted.
- **THIRA.** In FY 2014, DHS is requiring grantees receiving funding assistance from the Homeland Security Grant Program, Tribal Homeland Security Grant Program, and the Emergency Management Performance Grants Program to complete a THIRA report. The THIRA process helps communities to understand their threats and hazards and how the impacts may vary according to time of occurrence, season, location, and numerous other community factors. The THIRA process results in whole community-informed capability targets and resource requirements necessary to address anticipated and unanticipated risks.⁴⁶ Developing and updating an effective THIRA requires active involvement from the whole community to ensure assessments and planning efforts are representative of the whole community. Therefore, grantees should actively engage in the THIRA process and convey the impact of various threats and hazards on emergency communications, as well as desired outcomes to statewide THIRA planners. Grantees should be aware that DHS funding may be placed on hold until the THIRA is submitted. For additional information, refer to each grant program's FY 2014 Funding Opportunity Announcement for grant-specific THIRA requirements and impact on annual grant funding.⁴⁷
- **Authority to Operate.** In establishing the NPSBN and providing the spectrum license to FirstNet, Congress envisions a nationwide interoperable public safety broadband network with a single national architecture to ensure interoperability for public safety entities. FirstNet is the single licensee for the combined public safety broadband spectrum band (763-768 MHz and 793-798 MHz) and D Block spectrum (758-763 MHz and 788-793 MHz). Grantees that do *not* have authority to operate in that designated public safety broadband spectrum (e.g., an agreement with FirstNet) cannot utilize that spectrum. Grantees that do *not* have access to the designated spectrum should not use Federal financial assistance to support acquisition-based or deployment-based broadband projects until such time as they have received the necessary authority to operate in the designated spectrum. Grantees that have authority to operate may submit projects for funding; however, projects will be subject to Federal review to ensure proposed projects support FirstNet's efforts to deploy the NPSBN.

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.

⁴⁶ For additional information on the THIRA process, refer to Comprehensive Preparedness Guide (CPG) 201: Threat and Hazard Identification and Risk Assessment Guide at: http://www.fema.gov/media-library-data/8ca0a9e54dc8b037a55b402b2a269e94/CPG201_htirag_2nd_edition.pdf.

⁴⁷ Funding Opportunity Announcements for FEMA preparedness grant programs can be located at: <http://www.fema.gov/preparedness-non-disaster-grants>.

Federal Grant Restrictions

Grantees should be aware of common restrictions on Federal grant funding and should consult the grants officer with any questions, particularly as requirements vary by program.

- **Commingling or Duplication of Funds.** Since multiple agencies are involved in communications projects, projects are often funded with multiple grant programs, creating a risk of commingling and duplication. 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 to include activities related to broadband.
- **Cost Sharing/Matching Funds.** Grantees must meet all matching requirements prescribed by the grant. If matching funds are required under a grant, grantees must provide matching funds or in-kind goods and services that must be:
 - 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. For more information on personnel, refer to Section 4. *Eligible Activities – Personnel*.
- **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.

4. Eligible Activities

The following section details eligible emergency communications activities commonly funded by Federal grants, including personnel and the four common cost categories: Planning and Organization, Training, Exercises, and Equipment.⁴⁸ Applicants seeking to improve interoperable emergency communications are encouraged to allocate grant funding to these activities but must consult the specific grant guidance for allowable costs.

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, or consultants to assist with emergency communications planning, training, and exercise activities.⁴⁹ 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
 - Support training conferences

⁴⁸The 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.

⁴⁹Typically, the use of Federal grant funding to pay for staff or contractor regular time is considered personnel.

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- 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 accordance 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 activities (e.g., emergency communications training and exercises).
- **Backfill-related Overtime.** Some Federal grants allow funds to be used for backfill 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 jurisdictions, 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 or enhancement of interoperable emergency communications plans.** Grant funds may be used to develop or enhance interoperable communications plans and align plans to the strategic goals, objectives, and recommendations set forth in the NECP. Examples of emergency communications plans include:
 - Plans to implement and measure the NECP
 - SCIPs, to include updates to maintain LMR systems and address wireless broadband, 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
 - Plans for relocating existing systems operating in the T-Band
 - 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 backup communications in the event that primary systems or equipment fail (e.g., contingency and strategic planning)
 - Planning for training and exercises
 - Planning activities in support of the NPSBN

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 before developing applications or proposing modifications to existing projects to determine if those activities are allowable under the grant.

- **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. The *National Preparedness Goal* and the National Preparedness System concepts, as described in PPD-8 recognize that the development and sustainment of core capabilities are not exclusive to any single level of government or organization, but rather require the combined effort of the whole community.⁵⁰ 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 or coordination meetings
 - Attending planning or educational meetings on emergency communications

⁵⁰ 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>.

- **Establishment or enhancement of interoperability governing bodies.** Strong governance structures and leadership are essential to effective decision-making, coordination, planning for, and managing emergency communications initiatives. Grant funds may be used to establish, update, or enhance statewide (e.g., SIGB), regional (e.g., multi-State, multi-urban area), or local interoperability governing bodies. 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
 - Increasing participation in governing bodies through public education and outreach
 - Travel and supplies for governing body meetings
 - Attending planning or educational meetings on emergency communications or public safety broadband issues
 - Developing SOPs and other templates to provide access to and use of existing resources and infrastructure
 - Establishing new bodies or sub-groups to address broadband planning
 - Ensuring coordination between traditional LMR governance programs and other decision-making offices, bodies, and individuals that oversee broadband and technology deployments in States, territories, localities, and tribes

- **Development of emergency communications assessments and inventories.** Grantees are encouraged to allocate grant funding to planning activities, such as assessments of:
 - Technology capabilities, infrastructure, and equipment (e.g., CASM NextGen, fleet maps)
 - SOPs, coordination of interoperability channels, and regional response plans
 - Training and exercises
 - Narrowband compliance capabilities, assets, and coverage gaps
 - Current broadband usage and user needs
 - Development of cost maintenance models for equipment and usage

- **Development or 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, and cross-border agreements
 - Plans to integrate SOPs across disciplines, jurisdictions, levels of government, and with private entities, as appropriate, and into mutual aid agreements
 - Response plans to specific disasters or emergencies
 - Field guides and templates for field guides

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

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- 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)⁵¹
- Preliminary planning for other advanced technologies (e.g., alerts and warnings, Next Generation 9-1-1)
- **Use of priority service programs.**⁵² 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)

Additional Requirements and Recommendations for Planning Activities

Additional activities in support of Federal planning initiatives and grant requirements include updating and submitting a SPR, THIRA, and SCIP Annual Progress Report, as well as ensuring NIMS compliance.

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 be reflected in SCIP Annual Progress Reports. Recipients should continue to train on LMR systems as it is necessary to ensure that emergency responders can achieve mission critical voice communications. However, as wireless broadband and other communications technologies become integrated into response operations, the need for training becomes even more critical to ensure that response personnel are maximizing the benefits that these new communications capabilities provide. Training projects should be consistent with the NECP priorities and address gaps identified through SCIPs, TICPs, AARs, and other assessments. 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.**⁵³ 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 should focus on:
 - Use of SOPs and other established operational protocols (e.g., common language)

⁵¹ Development of these plans will not be funded until FirstNet issues guidance on the technical requirements of the network.

⁵² For more information on priority services, see: <http://gets.ncs.gov/index.html>.

⁵³ 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.

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- NIMS/ICS training
 - COML, 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 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)

Additional Requirements and Recommendations for Training Activities

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

- **Compliance with NIMS.**⁵⁴ State, local, tribal, and territorial entities must adopt NIMS 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.
- **Completion of Communications Unit Leader Training.** OEC, in partnership with OIC, FEMA, the 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, disciplines, and levels of government and include emergency management, emergency medical services, law enforcement, interoperability coordinators, public health officials, hospital officials, and other disciplines and private sector entities, as appropriate. Findings from exercises can be used to update programs to address gaps in emergency communications as well as emerging technologies, policies, and partners. Recipients are encouraged to increase awareness and availability of emergency communications exercise opportunities across all levels of government.

⁵⁴ 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. For more information on NIMS training, see: <http://www.fema.gov/national-incident-management-system>.

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 functional exercises. Activities should focus on:
 - 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 a strategic technology reserve
 - Designing and executing regional (e.g., multi-State, multi-urban area) exercises
 - Using broadband equipment and systems, and other advanced technologies
 - Testing SOPs
- **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.** HSPD-5 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, FirstNet State Single POC, and SIGB/SIEC to facilitate participation by the appropriate entities (e.g., public safety, utilities, private sector, Federal agencies) 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,⁵⁵ implementation, enhancement, replacement, and maintenance of LMR and other emergency communications systems and equipment,⁵⁶ 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 backup emergency communications⁵⁷

- **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. If not yet in compliance, 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

- **Site upgrades for LMR and other emergency communications systems.⁵⁸**
 - 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

⁵⁵ 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.

⁵⁶ 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.

⁵⁷ Many public safety entities leverage commercial services to augment emergency communications. Reimbursement of cellular and satellite fees are often allowable under Federal grants.

⁵⁸ 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.

- 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.**
 - Documenting existing wireline and wireless backhaul resources to determine used and excess capacity (e.g., connectivity type of either fiber, wireline, or cable at communications sites and existing public safety facilities)
 - Analyzing existing 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)
 - 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:**
 - Standards-based interoperable communications equipment listed on the Authorized Equipment List⁵⁹
 - 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., radio frequency and network test equipment including handheld spectrum analyzers, cable testers)

⁵⁹ For a list of equipment typically allowed under grants, see the FEMA Authorized Equipment List on the Lessons Learned Information Sharing site at: <https://www.llis.dhs.gov/knowledgebase/ael>.

Additional Requirements and Recommendations for Equipment Purchases

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

- **Coordination with the SWIC, FirstNet State Single POC, and other emergency communications partners.** Grantees are strongly encouraged to coordinate with the SWIC, FirstNet State Single POC, 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.⁶⁰ 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 NPSBN standards.** Grantees interested in deploying in the 700 MHz public safety band should consult their SWIC and FirstNet State Single POC to ensure the project supports the statewide plan for broadband deployment and does not hinder the NPSBN.
- **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 Federal granting agencies *before* beginning work to determine whether proposed activities are allowed, and to determine if proposed activities are subject to EHP review.⁶¹
- **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.

⁶⁰ 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.

⁶¹ 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.

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- **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.⁶² 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.

⁶² 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.⁶³ The P25 suite of standards is published by the Telecommunications Industry Association (TIA).⁶⁴ 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.⁶⁵

For additional information on P25 and resources, grantees can register for the P25 Technology Interest Group (PTIG) website at: <http://www.project25.org/>. To ensure projects are compliant with the P25 suite of standards, grantees should:

- **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).⁶⁶

⁶³ Grantees should read grant guidance carefully to ensure compliance with standards, allowable cost, documentation, reporting, and audit requirements.

⁶⁴ The 2013 P25 suite of standards is available at: <http://www.tiaonline.org/all-standards/committees/tr-8>.

⁶⁵ See: <http://www.project25.org/documents/ptig-suggested-technical-documents/241-p25-sor-published-q4-2013>.

⁶⁶ 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.

- **Include P25 Standards in Statement of Requirements/Bids.** Grantees should include all applicable standards and expectations for interoperability in any statement of requirements 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.⁶⁷

- **Select P25 Eligible Equipment.** Grantees can use the Lessons Learned Information Sharing (LLIS) website to identify equipment that has been tested based on the P25 Compliance Assessment Program (P25 CAP).⁶⁸
- **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 latest P25 CAP Compliance Assessment Bulletins for testing requirements.

Grantees should be prepared to demonstrate how their procurements comply with these requirements. When purchasing P25 LMR equipment and 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* 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 <https://www.llis.dhs.gov/knowledgebase/certifications-declarations-list>.

If documentation is not available through the P25 CAP, agencies should obtain documented evidence from the manufacturer. Securing documentation of compliance either through the P25 CAP 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.

- **Ensure compliance with P25/Advanced Encryption Standard (AES), if applicable.** In order to ensure the interoperability of encrypted communications, devices used by

⁶⁷ See *Enhancing Communications Interoperability: Guidelines for Developing Requests for Proposals* at: <http://www.safecomprogram.gov/SiteCollectionDocuments/GuidelinesforRFPDevelopmentCW62806.pdf>.

⁶⁸ For more information on the P25 CAP, see: <https://www.llis.dhs.gov/knowledgebase>.

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 the AES 256-bit Encryption Algorithm. 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 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 as it will help to ensure future interoperability with Federal entities.

- **Ensure Additional Features Purchased are P25 Compliant.** When Federal grant funds are used to purchase new P25 LMR equipment and systems containing non-standard features or capabilities, and a comparable P25 feature or 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 and systems or to add non-standard features or capabilities, and a comparable P25 feature or capability is available, grantees must ensure that the standards-based feature or capability is included as well.
- **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 non standards-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 (e.g., 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 Federal granting agencies 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 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 BSI⁶⁹ specification or the P25 Inter Radio Frequency Sub-System Interface (ISSI) as a part of their VoIP capability.

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. In the case that the system does not comply with OASIS EDXL, it should still conform to the National Information Exchange Model. 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 (NIEM)

NIEM is a framework established by DHS and the 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. Federally-funded systems supporting emergency

⁶⁹ The BSI is a VoIP interface between bridging or gateway devices. More information is available at: <http://www.safecomprogram.gov/currentprojects/voip/Default.aspx>.

response information sharing should refer to the NIEM conformance rules to implement their information sharing exchanges.

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

In NIEM, a “data exchange” is also known as the Information Exchange Package (IEP), a description of specific information exchanged between a sender and a receiver. The IEP is usually coupled with additional documentation, sample XML instances, business rules, and more to compose an Information Exchange Package Documentation (IEPD). The resulting work product is an IEPD, which is a set of artifacts that define a particular data exchange. NIEM provides rules and guidance regarding the content of artifacts in an IEPD and the format of those artifacts in order to promote consistency. 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.⁷⁰

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 conformance testing through the STEP managed by FEMA P-TAC Center.⁷¹ 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).

Next Generation (NG) 9-1-1

A variety of technical and operational standards for the implementation of NG 9-1-1 already exist, and many are actively under development. However, there is limited coordination across the broad NG 9-1-1 community regarding what completed standards are available, what standards overlap, and what standards still need to be established. The NG 9-1-1 Standards Identification and Review document contains a comprehensive listing of NG 9-1-1 standards which have been vetted by each Standards Development Organization (SDO) that is mentioned, to assess the status of specific standards.⁷²

⁷⁰ 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>.

⁷¹ 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>.

⁷² For more information on NG 9-1-1, please refer to: <http://www.911.gov/911-issues/standards.html>.

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 2014. 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. However, specific guidance on the network architecture, related technical requirements, and spectrum access has not been finalized. 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 Single POC to ensure the proposed project supports the State's broadband plan. Further, grantees should continue to monitor Federal actions affecting broadband investments, to ensure future projects are compliant with new programmatic and technical requirements.

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.⁷³

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 and future solutions. Grantees are encouraged to implement innovative solutions that will yield improvements to current communications capabilities and help the agencies plan for and prepare for the deployment of the NPSBN.

⁷³ 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 and access grant funds. It also can establish the entity as a trusted and capable steward of Federal funding that is able to manage additional funds in the future. This section provides guidance and best practices for grantees to leverage throughout the grant life cycle. Table 2 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 2. Suggested Actions and Best Practices to Leverage During Grant Cycle Phases

| Phases | Suggested Actions/Best Practices |
|-------------------|---|
| Pre-Award | <ul style="list-style-type: none"> • Review and understand the SCIP • Coordinate with the SWIC and the whole community to document needs, 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 grant guidance • Consult the Federal granting agency, spectrum authority (FCC or FirstNet), and <i>FY 2014 SAFECOM Guidance Resources (Appendix)</i> when developing projects • Align projects to Federal plans and initiatives • Include coordination efforts with the whole community in applications • Identify staff to manage financial reporting and programmatic compliance requirements • Develop project and budget milestones to ensure timely completion • Identify performance measures and metrics that will help demonstrate impact • Consider potential impacts of EHP requirements 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 | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • 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 and budget milestones; document and justify any delays • Leverage Federal resources, best practices, and technical assistance • Complete financial and performance reports on time • Draw down Federal funds as planned in budget milestones or in regular intervals |
| Close-Out | <ul style="list-style-type: none"> • 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 Emergency Communications Preparedness Center Grants Focus Group, OEC identified 25 Federal grants and loans that fund emergency communications.⁷⁴ 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
- Understand what past grants have funded in your jurisdiction
- Partner with entities eligible to receive other sources of funding

Other Sources of Funding

While the *SAFECOM 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 USDA Rural Utility Service's 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.⁷⁵

OEC has included loans in the list of grants posted to the SAFECOM website.⁷⁶ 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 for 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; improve integration and interoperability of emergency communications; provide critical infrastructure protection and outage prevention; and increase the reliability of 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.

⁷⁴ 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>.

⁷⁵ For additional information on USDA's Rural Utility Service, refer to: http://www.rurdev.usda.gov/utilities_LP.html.

⁷⁶ See: <http://www.safecomprogram.gov/grant/Default.aspx>.

Appendix A – 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 |
| CASMNextGen | Next Generation Communication Assets Survey and Mapping |
| CEQR | Council on Environmental Quality Regulations |
| COML | Communications Unit Leader |
| COMT | Communications Technician |
| CONOPS | Concept of Operations |
| DE | Distribution Element |
| DES-OFB | Data Encryption Standard-Output Feedback |
| DHS | Department of Homeland Security |
| DOI | Department of the Interior |
| DOJ | Department of Justice |
| DOT | Department of Transportation |
| ECPC | Emergency Communications Preparedness Center |
| EDXL | Emergency Data eXchange Language |
| EHP | Environmental and Historic Preservation |
| FCC | Federal Communications Commission |
| FEMA | Federal Emergency Management Agency |
| FirstNet | First Responder Network Authority |
| FY | Fiscal Year |
| GAO | Government Accountability Office |
| GETS | Government Emergency Telecommunications Service |
| HAVE | Hospital AVailability Exchange |
| HSEEP | Homeland Security Exercise and Evaluation Program |
| HSPD | Homeland Security Presidential Directive |
| IB | Information Bulletin |

Appendix A—Acronym List

| | |
|----------|--|
| 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 |
| MOA | Memorandum of Agreement |
| MOU | Memorandum of Understanding |
| NCSWIC | National Council of Statewide Interoperability Coordinators |
| NECP | National Emergency Communications Plan |
| NEP | National Exercise Program |
| NIST | National Institute of Standards and Technology |
| NG 9-1-1 | 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 |
| OCFO | Office of the Chief Financial Officer |
| OEC | Office of Emergency Communications |
| OIC | Office for Interoperability and Compatibility |
| OMB | Office of Management and Budget |
| P25 | Project 25 |
| P25 CAP | P25 Compliance Assessment Program |
| POETE | Planning, Organization, Equipment, Training, and Exercises |
| PPD | Presidential Policy Directive |

Appendix A—Acronym List

| | |
|----------------|--|
| 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 |
| 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 Single Point of Contact |
| SPR | State Preparedness Report |
| STEP | Supporting Technology Evaluation Project |
| SWIC | Statewide Interoperability Coordinator |
| THIRA | Threat and Hazard Identification and Risk Assessment |
| TIA | Telecommunications Industry Association |
| TICP | Tactical Interoperable Communications Plan |
| TSP | Telecommunications Service Program |
| UASI | Urban Areas Security Initiative |
| USDA | United States Department of Agriculture |
| VoIP | Voice over Internet Protocol |
| WPS | Wireless Priority Service |

Appendix B – Emergency Communications Resources

Appendix B provides links to resources referenced in the *FY 2014 SAFECOM Guidance* and additional resources to help grantees develop emergency communications 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>
- 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

- The National 9-1-1 Program's website for Next Generation 9-1-1/National Plan for Migrating to IP-Enabled 9-1-1 Systems is available at: <http://www.911.gov/>
- [Next Generation 9-1-1 Standards Identification and Review](http://www.911.gov/911-issues/standards.html) available at: <http://www.911.gov/911-issues/standards.html>

Authorized Equipment List (AEL)

- For a list of interoperable emergency communications equipment typically allowed under emergency communications grants, see the list of Interoperable Communications Equipment on the FEMA AEL on the Lessons Learned and Information Sharing (LLIS) website at: <https://www.llis.dhs.gov/knowledgebase/ael>

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>

Appendix B—Emergency Communications Resources

Broadband

- Standards for Other Broadband Technologies: FCC Tech Topic #11: WiMAX Applications for Public Safety at: <http://transition.fcc.gov/pshs/techttopics/techttopics11.html>

Broadband Technology Opportunities Program (BTOP)

- See NTIA BTOP site: <http://www2.ntia.doc.gov/>

Cost Sharing/Matching Resources

- General guidance on match can be found in Section 3.4 of the *FY 2014 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 2014 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 2014 SAFECOM Guidance*, Section 4.5 - *Additional Requirements and Recommendations for Equipment Purchases*
- For more information on the environmental review process, see: <http://ceq.hss.doe.gov/index.html>
- For questions on EHP for FEMA grants, contact: GPDEHPInfo@fema.gov

Equipment Standards

- For guidance on equipment and equipment standards, see: *FY 2014 SAFECOM Guidance*, Sections 4.5 and 5
- 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/techttopics/techttopics16.html>
- 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 2014 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

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- 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>
- NIMS National Standard Curriculum Training Development Guidance can be found at: <http://www.fema.gov/training-0>

Federal Communications Commission (FCC) Resources

- 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) 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/grant.html>
- Grants.gov site: <http://www.grants.gov>
- FEMA Grants page: <http://www.fema.gov/grants>

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's 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 Planning for Wireless Broadband

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

Law Enforcement Resources

- Law Enforcement Tech Guide for Communications Interoperability, see: <http://ric-zai-inc.com/ric.php?page=detail&id=COPS-W0714>
- Law Enforcement Tech Guide Resources for Technology Project Management, see: <http://ric-zai-inc.com/ric.php?page=detail&id=COPS-CD040>

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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

Middle Class Tax Relief and Job Creation Act

- To obtain a copy of the Act, see: <http://www.gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf>
- Public Safety Broadband: Fulfilling a 9/11 Commission Recommendation: <http://www.dhs.gov/public-safety-broadband-fulfilling-911-commission-recommendation>

Narrowbanding

- See *FY 2014 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 Broadband Plan

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

National Emergency Communications Plan (NECP)

- For the NECP, see: https://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf
- For NECP Goals, see: <http://www.dhs.gov/national-emergency-communications-plan-necp-goals>

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>

National Information Exchange Model (NIEM)

- Information on NIEM can be found at: <https://www.niem.gov/Pages/default.aspx>

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- 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/national-preparedness-goal>

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>

National Public Safety Telecommunications Council (NPSTC)

- NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership
- For more information on NPSTC, see: <http://www.npstc.org/>

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: oecc@hq.dhs.gov
- OEC Guidance documents: <http://www.safecomprogram.gov/oeccguidancedocuments/Default.aspx>
- OEC Technical Assistance Catalog: http://www.publicsafetytools.info/start_index.php

OMB Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

- OMB provides grant resources on its Grants Management page at: http://www.regulations.gov/#%21documentDetail;D=OMB_FRDOC_0001-0127

Performance Measurement

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

Planning Guidance and Resources – OEC Resources on SAFECOM Website

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

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- *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>
- *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>

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://www.dhs.gov/government-emergency-telecommunications-service-gets>

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

- See the *FY 2014 SAFECOM Guidance*, Section 5.1
- The P25 suite of standards is available at: <http://www.tiaonline.org/all-standards/committees/tr-8>
- For additional information on P25 information and resources, grantees can register (free of charge) for the PTIG website at: <http://www.project25.org/>
- For information on the P25 Compliance Assessment Program (CAP), see: <https://www.llis.dhs.gov/knowledgebase>

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

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>

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)

- SLIGP FOA: <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 Interoperability Coordinator (SWIC)

- See *FY 2014 SAFECOM Guidance*, Sections 3.2 and 4.2
- *Establishing Governance to Achieve Statewide Communications Interoperability:* <http://www.safecomprogram.gov/SiteCollectionDocuments/EstablishingGovernanceGuide.pdf>

Statewide Communication Interoperability Plan (SCIP)

- See *FY 2014 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: oeq@hq.dhs.gov

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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>

Technical Assistance Catalog

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

Threat and Hazard Risk Assessment (THIRA)

- http://www.fema.gov/media-library-data/8ca0a9e54dc8b037a55b402b2a269e94/CPG201_htirag_2nd_edition.pdf

Training Resources

- For guidance on emergency communications training, see *FY 2014 SAFECOM Guidance*, Section 4.3
- 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 2014 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 on WiMAX applications for Public Safety, see: <http://transition.fcc.gov/pshs/techtopics/techtopics11.html>