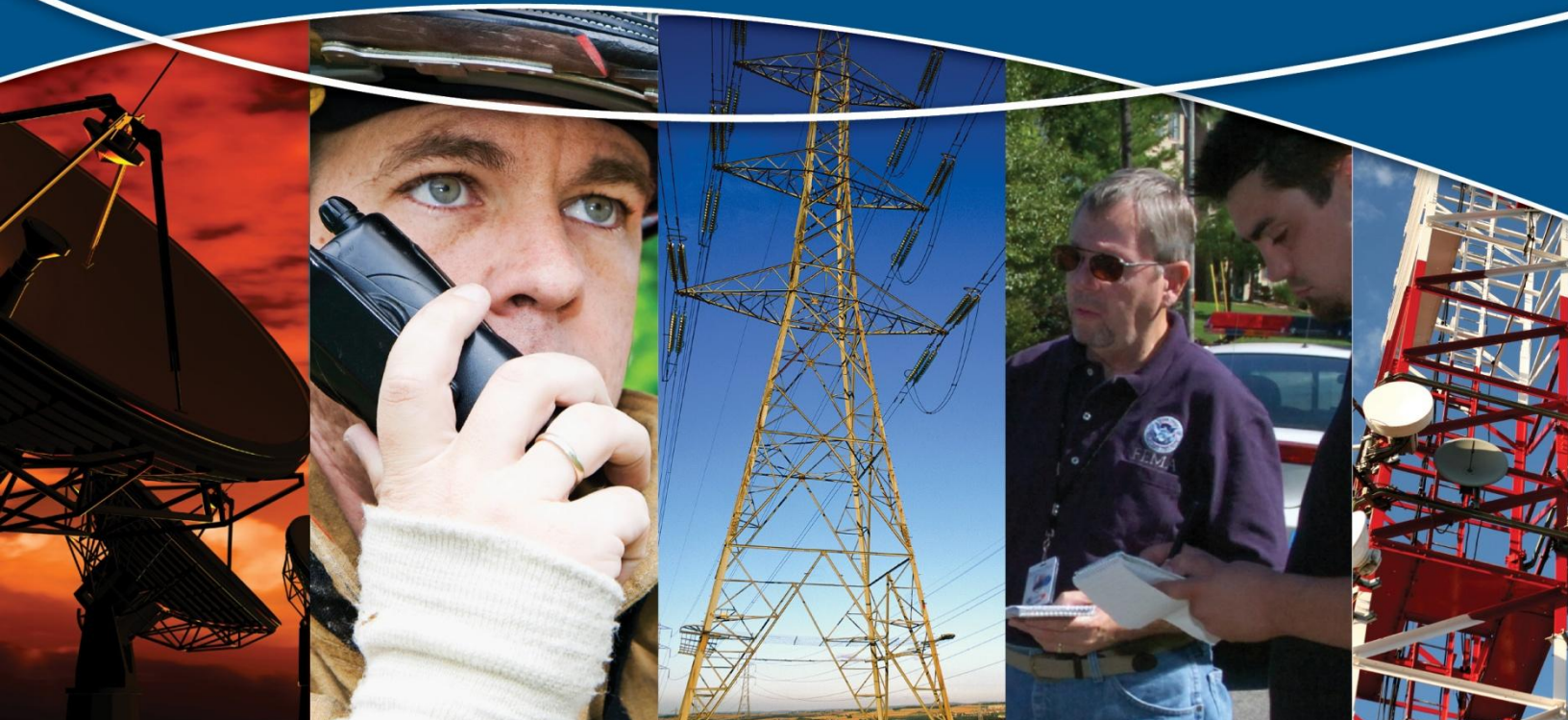


ECPC Recommendations to Federal Agencies: Financial Assistance for Emergency Communications October 2011



PREFACE

The Emergency Communications Preparedness Center (ECPC) is an interagency coordinating body that supports and promotes the ability of emergency response providers and government officials to communicate in the event of natural or man-made disasters and to enhance interoperable emergency communications nationwide. The ECPC Executive Committee quickly recognized the need to better coordinate Federal programs that support emergency communications, and subsequently formed a Grant Focus Group (GFG) to develop common guidance for these programs.

The *2011 ECPC Recommendations for Federal Agencies: Financial Assistance for Emergency Communications (2011 ECPC Grants Recommendations Document)* is an updated version of the initial Recommendations released in July 2010. The 2010 release encouraged Federal program managers to align programs to national goals, objectives, and priorities; include technical standards that promote interoperability; and share methods for developing common metrics to help the ECPC assess the impact of Federal funding on emergency communications nationwide. The 2011 version serves as a reference tool for Federal departments and agencies administering financial assistance programs that fund emergency communications, including grants, loans, and cooperative agreements. The document provides recommendations for Federal program administrators that aid in advancing national emergency communications priorities, policies and technical standards and promotes the alignment of grant funding to national emergency communications plans and use of common metrics. These recommendations will increase Federal coordination and consistency among emergency communications investments, and help advance emergency communications capabilities nationwide.

The *2011 ECPC Grants Recommendations Document* leverages the ECPC GFG member agencies' collective knowledge and experience with financial assistance programs. It also builds on the guidance provided in other documents, such as the *SAFECOM Guidance on Emergency Communications Grants*¹ and the Domestic Working Group *Guide to Opportunities for Improving Grant Accountability*.²

The ECPC GFG will continue to assess the impact of the *2011 ECPC Grants Recommendations Document* to increase consistency across Federal financial assistance programs, and will update the document annually to reflect the evolution and development of emergency communications priorities, policies, and technical standards.

¹ Developed by the Office of Emergency Communications and available at: http://www.safecomprogram.gov/NR/rdonlyres/7C73CFA8-DC8B-487C-82A0-42BD7C06F3BA/0/FY_2011_SAFECOM_Guidance_121510.pdf.

² Available at: <http://www.ignet.gov/randp/grantguide.pdf>.

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INTRODUCTION

The *2011 Emergency Communications Preparedness Center (ECPC) Recommendations to Federal Agencies: Financial Assistance for Emergency Communications (2011 ECPC Grants Recommendations Document)* is intended to help Federal financial assistance program administrators incorporate national priorities, policies, and technical standards and apply sample metrics to new and existing program guidance. This document serves as a reference guide and is not intended to override Federal agencies' specific legislative, programmatic, or administrative requirements (e.g., Office of Management and Budget [OMB] policies). Instead, the *2011 ECPC Grants Recommendations Document* targets areas where Federal agencies have flexibility to determine or implement agency-specific policies, requirements, or allowable costs.

This document includes the following updates from the *2010 ECPC Grants Recommendations Document*:

- **National Priorities, Policies, and Technical Standards** highlights the national priorities, policies, and technical standards currently shaping emergency communications and recommends that they be incorporated into grant guidance and kits. Appendix A provides updated recommended language for the national priorities, policies, and technical standards that program managers may include in their program guidance kits.
- **Common Metrics** includes revised approaches to help Federal program managers assess the impact of their financial assistance programs on emergency communications. This document also includes sample metrics for program managers to consider for inclusion in program guidance kits or reporting tools.
- **Best Practices** outlines a number of beneficial tactics to assist program managers in improving the effectiveness and impact of emergency communication grant programs.
- **National Plan Alignment Data** provides detailed analysis of how existing financial assistance programs are supporting the four national plans shaping emergency communications: National Emergency Communications Plan (NECP), National Broadband Plan, National Enhanced 911 Plan, and the National Infrastructure Protection Plan (NIPP).
- **Agency Funding Data** provides preliminary data on the level of Federal funding allocated to emergency communication projects.
- **Participating Department and Agency Points of Contact and the Fiscal Year 2010 Program Summaries** have been moved to the ECPC Clearinghouse portal.³
- **Comprehensive List of Federal Financial Assistance Programs Funding Emergency Communications** has been posted to the SAFECOM website.⁴ The ECPC GFG will update this information as 2011 program guidance becomes available.

While the authorizing legislation and Office of Management and Budget (OMB) policies establish basic requirements, the *2011 ECPC Grants Recommendations Document* provide a method to align Federal investments to national goals and objectives, and common standards and requirements that promote greater consistency among Federal financial assistance programs, and greater compatibility among Federally-funded projects.

ECPC Resources

The ECPC Clearinghouse, which resides on the Homeland Security Information Network (HSIN), is a secure website that allows ECPC GFG members to find, publish, and share emergency communications information. The *2011 ECPC Grants Recommendations Document* and supporting materials, such as the

³ For access to this site, or to contact a specific ECPC member agency representative, please e-mail ecpc@dhs.gov for assistance.

⁴ Available at: <http://www.safecomprogram.gov/SAFECOM/grant/default.htm>.

coordinated calendar and agency contact information, are posted on the ECPC Clearinghouse.⁵ Federal agencies funding emergency communications are encouraged to participate in the ECPC GFG to improve coordination across Federal financial assistance programs. Federal agencies interested in participating can contact the ECPC via e-mail at ecpc@dhs.gov.

How to Use This Document

Federal program managers are encouraged to use the *2011 ECPC Grants Recommendations Document* when developing new grants funding emergency communications and when updating existing grants funding emergency communications. Table 1 provides a step-by-step approach to using this document.

Table 1. Guide for Using This Document

Steps for Implementation	Federal Agency Action	Document Section
Step 1: Determine if your program provides funds for emergency communications, and coordinate with agencies administering similar programs	<ul style="list-style-type: none"> Review Program Alignment and List of Grants Funding Emergency Communications to identify similar program(s) Review guidance and contact staff for those programs to ensure coordination and consistency in funding 	<ul style="list-style-type: none"> Appendix D. Program Alignment List of Grants Funding Emergency Communications, see: http://www.safecomprogram.gov/SAFECON/Grant/default.htm Program Points of Contact on ECPC Clearinghouse (contact ecpc@dhs.gov for more information)
Step 2: Ensure your program supports (and does not contradict) goals in existing national plan(s) and associated regulations	<ul style="list-style-type: none"> Review National Priorities, Policies, and Technical Standards Review Program Alignment to determine alignment of plans to programs Coordinate with national plan points of contact to ensure program supports national goals 	<ul style="list-style-type: none"> Appendix A. National Priorities, Policies, and Technical Standards Appendix D. Program Alignment Program Points of Contact on ECPC Clearinghouse
Step 3: Determine allowable costs	<ul style="list-style-type: none"> Outline allowable cost categories for the program in consultation with legislative requirements and agency regulations and policy Review Program Alignment to identify similar programs; review allowable costs and Authorized Equipment Lists for those programs to ensure consistency Contact program managers and ECPC GFG to ensure allowable costs are consistent 	<ul style="list-style-type: none"> Appendix A. National Priorities, Policies, and Technical Standards (See Authorized Equipment List) Appendix B. Best Practices Appendix D. Program Alignment List of Grants Funding Emergency Communications
Step 4: Determine which policies and technical standards are applicable to your program	<ul style="list-style-type: none"> Review National Priorities, Policies, and Technical Standards Review Program Alignment to identify similar programs; contact program managers to ensure consistency in policies and standards Incorporate recommended language for national policies and technical standards into grant guidance or agreements 	<ul style="list-style-type: none"> Appendix A. National Priorities, Policies, and Technical Standards (See Authorized Equipment List) Appendix D. Program Alignment List of Grants Funding Emergency Communications
Step 5: Collect project details	<ul style="list-style-type: none"> Review Common Metrics section of the document Collect basic project information for all projects involving emergency communications Report project information to the ECPC GFG 	<ul style="list-style-type: none"> Common Metrics Table 6 Sample Metrics For assistance with project abstracts, contact: ecpc@dhs.gov
Step 6: Determine which metrics will be the most useful to report on progress and impact	<ul style="list-style-type: none"> Review sample metrics to determine most applicable metrics based on allowable cost categories Insert critical questions into grant guidance to capture project data and metrics Report to the ECPC GFG 	<ul style="list-style-type: none"> Common Metrics Table 6 Sample Metrics For assistance with metrics, contact ecpc@dhs.gov
Step 7: Share best practices and lessons learned	<ul style="list-style-type: none"> Share best practices, issues, stakeholder input, findings, and reports with GFG and on ECPC Clearinghouse Share events on ECPC Coordinated Calendar Explore opportunities to review other program guidance and program applications Consult with GFG on national policies and standards Attend other agencies' conferences or hearings 	<ul style="list-style-type: none"> List of Grants Funding Emergency Communications Participating Agencies' Points of Contact on ECPC Clearinghouse (contact ecpc@dhs.gov) Coordinated Calendar on ECPC Clearinghouse (contact ecpc@dhs.gov)

⁵ Available at: <https://cs.hsin.gov/C7/ECPC%20Clearinghouse/default.aspx>.

NATIONAL PRIORITIES, POLICIES, AND TECHNICAL STANDARDS

National priorities, policies and technical standards each play an important role in establishing the vision, framework, strategy, and approach for advancing the nation's emergency communications capabilities. The *SAFECOM Guidance on Emergency Communications Grants*⁶ (*SAFECOM Guidance*) describes many of the national initiatives that affect emergency communications, best practices that promote coordination in grants, and technical standards that improve interoperability. These policies are updated each year and are designed to help state and local applicants ensure Federally-funded emergency communications projects are coordinated, compatible, and interoperable.

Federal agencies and financial assistance recipients have applied the SAFECOM-recommended best practices and technical standards to shape emergency communications grants guidance. However, some Federal agencies have incorporated these policies into guidance kits, while other agencies have not. These inconsistencies have led to confusion among recipients and to policies that may hinder interoperability. For example, two agencies may both require that emergency communications equipment purchased with Federal funding be Project 25 (P25)-compliant;⁷ however, one agency may permit a recipient to file a waiver to purchase equipment that is not P25-compliant, while another agency may not allow waivers. Such inconsistencies in Federal grant policy may result in two Federally-funded emergency communications projects built in neighboring jurisdictions that cannot interoperate because they are built to different standards.

To ensure consistency in policy across all Federal grants, the ECPC GFG developed a comprehensive list of national priorities, policies, and technical standards for Federal agencies administering emergency communication grants; this list was first published in the *FY 2010 ECPC Grants Recommendations Document*. Leveraging last year's process, the ECPC GFG updated this list using the *FY 2011 SAFECOM Guidance* in concert with member agencies and subject matter experts.

RECOMMENDATIONS TO INCORPORATE NATIONAL PRIORITIES, POLICIES, AND TECHNICAL STANDARDS

Incorporate common priorities, policies, and technical standards into grants. The ECPC recommends that Federal agencies adopt common priorities, policies, and technical standards, and incorporate them into all grants funding emergency communications. The full adoption of common priorities, policies, and technical standards across all agencies will promote greater coordination and compatibility in Federally-funded emergency communication projects. The table below provides an overview of the national priorities, policies, and technical standards. Detailed information and recommended language is provided in Appendix A. The *2011 ECPC Grants Recommendations Document* provides this information as a reference guide for program managers. Program managers are encouraged to use the recommended language when revising or developing policies and guidance for emergency communications programs.

⁶ SAFECOM Guidance: http://www.safecomprogram.gov/SAFECOM/library/grant/1638_fy2011.htm.

⁷ P25 refers to a suite of technology standards for digital radio communications used by Federal, state, and local public safety agencies that helps to ensure that equipment is interoperable. Many financial assistance programs require emergency communication investments to comply with voluntary consensus standards to promote interoperability. For example, in the 9/11 Act, Congress prohibits the DHS Secretary from awarding grants for the purchase of equipment that does not meet applicable voluntary consensus standards, unless the State demonstrates that there is a compelling reason for such a purchase.

Table 2. National Priorities, Policies, and Technical Standards Overview

National Priority, Policy, or Technical Standard	Description
700 MHz Public Safety Broadband Network	<p>One of the recommendations of the National Broadband Plan is to enable the deployment and operation of a nationwide, interoperable public safety broadband network. Specifically, the Plan makes the following recommendations with respect to the network:</p> <ul style="list-style-type: none"> – Create an administrative system that ensures access to sufficient capacity on a day-to-day and emergency basis. – Ensure there is a mechanism in place to promote interoperability and operability of the network. – Establish a funding mechanism to ensure the network is deployed throughout the United States and has necessary coverage, resiliency, and redundancy. <p>Conform existing programs to operate with the public safety broadband wireless network.</p>
800 Megahertz (MHz) Rebanding	<p>800 MHz rebanding eliminates interference between existing public safety 800 MHz systems and certain commercial cellular wireless networks by migrating incompatible technologies to separate segments within the 800 MHz band. The Federal Communications Commission (FCC) ordered reconfiguration of the 800 MHz band and required Sprint Nextel, the primary commercial operator in the 800 MHz band, to pay rebanding costs incurred by public safety.</p>
Authorized Equipment List (AEL)	<p>The AEL is a generic list of allowable equipment developed by the Department of Homeland Security (DHS) Federal Emergency Management Agency (FEMA) Grant Programs Directorate and posted on FEMA's Responder Knowledge Base website. Program administrators use the AEL to define specific equipment and activities allowable under the program, and by recipients to determine whether certain equipment and activities are allowable under a program. Items not on the AEL can be allowed, but only after the grantee provides written justification and that request has gone through an internal FEMA review process.</p>
Communications Unit Leader (COML)	<p>The COML is a position under the Logistics Section of the Incident Command System (ICS) (see pages 57-58 of the National Incident Management System [NIMS], which is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf). The COML reports directly to the Logistics Chief or Incident Commander. A COML's responsibilities include developing plans for the effective use of incident communications equipment and facilities, managing the distribution of communications equipment to incident personnel, and coordinating the installation and testing of communications equipment. The COML supervises other members of the Communications Unit such as the Communications Technician (COMT), Radio Operator (RADO), and Incident Communications Center Manager (INCM), if those positions are filled during an incident. The COML may also supervise volunteer communicators, if available, such as the amateur radio emergency communications support team.</p>
Homeland Security Exercise and Evaluation Program (HSEEP) Guidance	<p>The HSEEP is a capabilities and performance-based exercise program that provides a standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and planning. HSEEP also provides tools and resources to facilitate the management of self-sustaining exercise programs.</p>
Narrowbanding	<p>In 2004, the FCC ruled that all private land mobile radio (LMR) users operating below 512 MHz must convert from 25 kilohertz (kHz) to 12.5 kHz narrowband voice channels before January 1, 2013. This effort focuses on the crowded very high frequency (VHF) bands (150 - 170 MHz) and ultra high frequency (UHF) bands (421 - 512 MHz) that are heavily used by public safety and non-public safety licensees. Narrowbanding will significantly increase spectrum efficiency in these bands and make new channels available for use by existing and new LMR systems.</p>
National Broadband Plan	<p>In early 2009, Congress directed the FCC to develop a National Broadband Plan to ensure every American has "access to broadband capability." Congress required that this plan include a detailed strategy for achieving affordability and maximizing use of broadband to advance "consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes." Pursuant to this directive, the FCC issued the National Broadband Plan in March 2010. Chapter 16 of the National Broadband Plan is dedicated to Public Safety. Recommendations, including promoting public safety wireless broadband communications, promoting cybersecurity and the protection of critical broadband infrastructure, and encouraging innovation in the development and deployment of Next Generation 911 (NG 911) networks and Next generation emergency alert systems.</p>
National Emergency Communications Plan (NECP)	<p>The NECP is the Nation's first strategic plan to improve emergency response communications, and it complements overarching homeland security and emergency communications legislation, strategies, and initiatives. The NECP is designed to ensure operability, interoperability, and continuity of communications to allow emergency responders to communicate as needed, on demand, and as authorized at all levels of government and across all disciplines.</p>
National Incident	<p>Homeland Security Presidential Directive 5 (HSPD-5), "Management of Domestic Incidents," directs the</p>

Management System (NIMS)	Secretary of DHS to develop and administer NIMS. NIMS establishes standardized incident management processes, protocols, and procedures that all Federal, state, local, and tribal responders will use to coordinate and conduct response actions. HSPD-5 required Federal departments and agencies to make adoption of NIMS by state, local, and tribal organizations a condition of Federal preparedness assistance (through grants, contracts, and other activities).
National Information Exchange Model (NIEM)	NIEM is a partnership between DHS and the U.S. Department of Justice (DOJ) to enable streamlined information sharing of data among Federal, state, local, and tribal agencies, as well as with private sector entities. NIEM allows organizations' disparate systems to share, exchange, accept, and translate information in an efficient manner.
National Infrastructure Protection Plan (NIPP)	The NIPP provides the unifying structure for the integration of efforts for the enhanced protection and resiliency of the nation's critical infrastructure and key resources (CIKR) into a single national program. The goal of the NIPP is to strengthen national preparedness, response, and recovery of CI/KR in the event of an attack, natural disaster, or other emergency.
National Response Framework (NRF) Emergency Support Function (ESF) Annex #2 – Communications	The NRF is a guide that details how the nation conducts all-hazards response – from the smallest incident to the largest catastrophe. ESF Annexes provide protocols for specific areas of response (e.g., firefighting, emergency management, transportation) and are the primary mechanisms used by emergency responders to organize response and provide assistance at the operational level. ESF Annex #2 – Communications supports the restoration of the Nation's communications infrastructure, facilitates the recovery of systems and applications from cyber attacks, and coordinates Federal communications support to response efforts during incidents requiring a coordinated Federal response.
Next Generation 911 (NG911) Migration Plan and Standards	The National 911 Program, led by the U.S. Department of Transportation's (USDOT) National Highway Traffic Safety Administration (NHTSA), has compiled a list of standards activities that will help transform today's legacy 911 system to NG911 and foster interoperability across multiple national, State, regional, and local public safety jurisdictions to NG9-1-1.
OASIS Emergency Data eXchange Language (EDXL)	OASIS EDXL is a suite of data messaging standards, including: <ul style="list-style-type: none"> – Common Alerting Protocol – Distribution Element – Hospital Availability Exchange – Resource Messaging
Priority Services	The National Communications System (NCS) offers a wide range of national security and emergency preparedness (NS/EP) communications services that support qualifying Federal, state, local, and tribal government, industry, and nonprofit organization personnel in performing their NS/EP missions. The NS/EP priority services include Government Emergency Telecommunications Services (GETS), Telecommunications Service Priority (TSP), and Wireless Priority Service (WPS).
P25 Standards	P25 is a suite of LMR standards, published by the Telecommunications Industry Association (TIA), that define 11 interfaces with features and functions for interoperable communications equipment. P25 is supported by agencies at all levels of government, both domestic and foreign, equipment manufacturers, and trade associations.
P25 CAP	The P25 Compliance Assessment Program (CAP) CAP is a voluntary program that allows P25 equipment suppliers to formally demonstrate their products' compliance with a select group of requirements by testing it in recognized labs. P25 CAP is a partnership of the DHS Command, Control, and Interoperability Division, the National Institute of Standards and Technology (NIST), industry, and the emergency response community. The P25 CAP establishes a process for ensuring that equipment complies with P25 standards and is capable of interoperating across manufacturers. The program helps emergency response officials make informed purchasing decisions.
SAFECOM Guidance	<i>SAFECOM Guidance</i> provides recommendations to grantees seeking funding for interoperable emergency communications projects, including allowable costs, items to consider when funding emergency communications projects, grants management best practices for emergency communications grants, and information on standards that ensure greater interoperability.
Standardized Equipment List (SEL)	The SEL is provided to the responder community by the Inter-Agency Board for Equipment Standardization and Interoperability (IAB). The SEL is a guideline, and its use is voluntary. The SEL promotes interoperability and standardization across the response community at the Federal, state, and local levels by offering a standard reference and a common set of terminology. The SEL has traditionally contained a list of generic equipment recommended by the IAB to Federal, State, and local government organizations preparing for and responding to all chemical, biological, radiological, nuclear, and explosive (CBRNE) events. This edition continues the transition to a broader "all-hazards" SEL, while maintaining an emphasis on CBRNE events.
Statewide Communication Interoperability Plan (SCIP)	SCIPs are locally-driven plans to improve emergency communications across a state. Through this statewide planning effort, states are able to identify where interoperability gaps exist, prioritize investments, and direct Federal funding where it is needed most.

COMMON METRICS

Federal agencies are responsible for exercising prudent oversight over their investments to ensure that Federal funds are used for intended purposes. To meet this responsibility, Federal program managers need to monitor and evaluate the progress of projects to determine whether recipients are meeting defined goals and objectives.

Monitoring and evaluating both financial and project data is required under several regulations including the Government Performance and Results Act of 1993, OMB Circulars and Directives, and American Recovery and Reinvestment Act grants and financial assistance programs. However, the ECPC GFG has found that Federal agencies measure performance and program impacts differently, which makes it difficult to assess the cumulative impact of Federal grant funds on emergency communications.

The ECPC GFG has established a strategic goal to measure the impact of Federal financial assistance on emergency communications goals. To achieve this goal, the GFG is developing common metrics that can be applied across all Federal financial assistance programs. The identification of common metrics will promote consistency of data collection and help the ECPC understand the collective impact of Federal funds on emergency communications.

ECPC GFG Vision to Performance Measurement and Metrics

The ECPC GFG outlined a four-step approach, highlighted in Table 3 below, for developing and implementing common metrics across Federal agencies funding emergency communications, which was included in the *2010 ECPC Grants Recommendations Document*.

Table 3. ECPC's Vision to Common Metrics

Step	Description
1	<ul style="list-style-type: none"> Identify all Federal programs funding emergency communications Determine associated level of funding
2	<ul style="list-style-type: none"> Align Federal financial assistance programs to national emergency communications goals and objectives Identify common metrics across programs that support emergency communications goals and objectives
3	<ul style="list-style-type: none"> Define metrics to apply to all programs funding emergency communications Request member agencies to apply sample metrics to individual programs
4	<ul style="list-style-type: none"> Collect and aggregate program data and evaluate ECPC's progress toward meeting national goals and objectives Assess impact of Federal funding on emergency communications Assess need for updated metrics

The ECPC GFG completed the first two steps over the course of the year; the group will update the data as agencies provide additional financial information and as new programs are developed. The recommendations at the end of this section outline the necessary activities to ensure progress against Steps 3 and 4 of the ECPC GFG vision to performance measurements and metrics.

Step 1—Funding Summary. The ECPC GFG asked member agencies to provide the level of funding each program allocated to emergency communications-related projects from FY 2008 through FY 2010 (see Appendix C). The GFG found that some programs fund only emergency communications-related projects, while other programs fund a broad range of activities with a limited emergency communications component. Member agencies were requested to provide—

- Total funds for each program containing an emergency communications component
- Total funds each program provided to emergency communications
- Total funds for equipment provided under each program funding emergency communications

Program funding data was taken from published grant guidance or agency websites and verified by member agencies. Table 4 below summarizes the funding data provided.

Table 4. Summary Funding Data (FY 2008-2010)

	Number of Programs	Total Funding
Total Programs Surveyed	48	\$ 24.8 billion
Programs Reporting on Emergency Communications Funding	14	\$ 2.5 billion

The total amount of funds available across those 48 programs was \$24.8 billion. However, only 14 of the 48 programs funding emergency communications were able to break out emergency communications-specific funding levels. Of those 14 programs, \$2.5 billion in Federal funding was allocated to emergency-communications-specific projects (\$2.1 billion of that to equipment). The \$2.5 billion identified in the table above may not represent the total investment of Federal financial assistance to emergency communications priorities since only 14 of the 48 programs were able to report emergency-communications-specific spending.

Step 2–Program Alignment. Aligning Federal financial assistance to national and state plans provides a framework for driving consistent and measurable progress nationwide. To determine whether existing programs align to national plans shaping emergency communications, the ECPC established a program alignment matrix (see Appendix D), and reviewed program guidance for each of the 48 programs funding emergency communications to demonstrate how each program aligns to the four major national plans—the National Broadband Plan, NECP, National E911 Plan, and NIPP (see Table 2 and Appendix A for more information on these plans). Table 5 provides the alignment results.

Table 5. Alignment to National Plans

National Plan	% of Aligned Programs	# of Aligned Programs
National Broadband Plan	42%	20
NECP	81%	39
National E-911	48%	17
NIPP	56%	27

By aligning the programs to the national plans, the ECPC GFG identified grants funding similar goals and opportunities for coordination among Federal agencies and across Federal grant programs. Appendix D provides the Program Alignment, highlighting the percentage of programs that allow investments that support national plan goals and objectives. This information can be useful to Federal program managers to—

- Understand how their programs support national plans
- Foster greater coordination with Federal agencies managing national plans and increased support of national plans
- Identify other programs funding similar goals and objectives
- Coordinate investments and ensure consistent policy between similar programs
- Refer grantees seeking funds to programs that support similar activities
- Direct funding toward under-represented goals and objectives

RECOMMENDATIONS FOR DEVELOPING COMMON METRICS

Distinguish emergency communications funding from general project funding. The GFG recommends that Federal agencies begin to segregate emergency communications funding from general project funding to allow for greater reporting on emergency communications. Federal agencies currently

use a variety of different reporting and accounting systems to track financial and project data. The ECPC GFG recognizes that replacing existing reporting processes will not be immediate. To help address this issue, the ECPC GFG recommends that Federal program managers insert basic language into their program guidance kits to ask applicants whether their proposed projects will improve emergency communications in the targeted jurisdiction, and if so, how. By adding these questions to grant applications, agencies will be better able to segregate emergency-communications-related projects from other types of projects, and it will allow the ECPC GFG to:

- Increase awareness of Federally funded assets and initiatives, project type, distribution and gaps
- Facilitate coordination among Federal funding agencies
- Facilitate coordination among state and local jurisdictions
- Promote resource sharing

Project managers should document the data collection process to ensure that it is well understood, easy to use and automated when possible. Successful organizations document the frequency of data collection, identify data sources, and make sure the data is readily available and accessible at the start. To ensure that the data will support the analyses for which it is intended, the data should meet the requirements and/or standards the performance metric establishes and meet accurate, timely, complete, consistent standards.

Review program alignment and coordinate with other agencies funding similar goals and objectives. The *2011 ECPC Grants Recommendations Document* encourages Federal program managers to review the alignment of their programs with the goals and objectives of the four plans highlighted in Table 2 and Appendix D. The ECPC encourages Federal program managers to become involved in the ECPC GFG to coordinate with other agencies supporting similar goals and objectives.

Apply sample metrics to grant and financial assistance programs. The ECPC GFG recommends that member agencies incorporate sample metrics into their respective grant programs' guidance and application kits. Table 6 provides a list of potential metrics an agency can use to collect data on emergency communications projects. This list can serve as a starting point for agencies to develop program guidance and instruct grantees on the use of metrics. For example, Federal agencies may choose to request this data from grantees during application submission, progress reporting, and grant close-out. Federal agencies can also build these metrics into their award agreements and reporting processes.

In the future, the ECPC GFG is looking to collect this sample metric data from Federal grant programs along with general project information including project name and goal, grantee, funding amount, and equipment purchases. The data collection effort would occur annually, during a timeframe jointly agreed-upon by the GFG member agencies. Leveraging this data set, the ECPC GFG will then determine and seek formal adoption of the common metrics most widely reported by ECPC GFG member agencies. With common metrics, the ECPC will be able to analyze how well financial assistance programs support national goals and objectives and illustrate the cumulative impact of Federal financial assistance programs on emergency communications nationwide.

Table 6. Sample Emergency Communications Metrics

Cost Category	Sample Metrics
Planning	<p>Number and/or Percentage of:</p> <ul style="list-style-type: none"> • Funding allocated to emergency communications planning • [Program] funds allocated to conduct emergency communications planning, or to establish/update emergency communication plans • [Program] funds to develop emergency communication-specific SOPs for natural disasters (e.g., hurricanes, tornados, ice storms, floods, earthquakes), terrorism incidents, or specific events • Recipients adopting emergency communications-specific SOPs as a direct result of the project • Recipients and amount of [Program] funds to develop emergency communication-specific Memoranda of Understanding (MOU), Memoranda of Agreement (MOA) and/ or regional or interstate emergency communication agreements • Agencies signed on to MOU and/ or Regional or interstate agreements as a direct result of the project • Recipients using [Program] funds to develop continuity of operations plans • State and/or regional governing board meetings held as a direct result of the grant
Training	<p>Number and/or Percentage of:</p> <ul style="list-style-type: none"> • Funding allocated to emergency communications training • Recipients using [Program] funds to develop emergency communications-specific training programs • Emergency communications (e.g. NIMS, COML, COMT) training sessions delivered and/or persons trained as a direct result of the grant • States reporting compliance through NIMS Compliance Assistance Support Tool (NIMSCAST)
Exercises	<p>Number and/or Percentage of:</p> <ul style="list-style-type: none"> • Funding allocated to emergency communications exercises • Emergency communications-based exercises (e.g., HSEEP and NECP Goals Demonstrations) held • Agencies involved in the same exercise from year to year • Improvement in communications response time to planned incident/exercise as a direct result of the grant funding
Equipment	<p>Number and/or Percentage of:</p> <ul style="list-style-type: none"> • Funding allocated for equipment • Equipment purchased with [Program] funds to interconnect and provide interoperability between standalone systems • Standalone systems linked and interoperable as a direct result of [Program] funded equipment • Agencies able to interoperate as a result of [Program] funded equipment
Overall Impact	<ul style="list-style-type: none"> • Percentage of key project goals and milestones achieved as a result of [Program] funding • Number of gaps addressed in state plans (e.g. SCIPs), as a direct result of [Program] funding • Progress made by community along the Interoperability Continuum⁸ as a direct result of [Program] funding • Percent of personnel (e.g. first responders, SWICs) hired to support emergency communications as a direct result of [Program] funding

⁸ The SAFECOM Interoperability Continuum is available at: http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/Interoperability_Continuum_Brochure_2.pdf.

FINANCIAL AND PROGRAMMATIC CONSIDERATIONS

Supporting all of these priorities with often limited Federal funds brings certain grants management challenges. The ECPC GFG recognizes that Federal program managers and grants administrators contend with numerous administrative requirements specific to Federal financial assistance programs. Table 7 provides a list of financial management challenges and issues they may need to confront in the administration and management of their assistance programs. Appendix B contains best practices to assist program managers and grants administrators as they address the issues included in this section.

Table 7. Potential Financial and Programmatic Issues

Challenge	Issue	Overview
Recipients require flexibility in using funding for an array of mission needs	Ensuring funds are used for purposes intended	Grantees are required to use Federal funds for purposes proposed in the application and approved by the awarding agency. Grantees must ensure that funds will not be used to support projects or activities that were not approved by the awarding agency without the prior written consent of the awarding agency.
Communications projects are often funded by portions of multiple grants	Commingling or duplication of funds	Federal financial assistance programs require recipients and sub-recipients to maintain records that adequately identify the source and application of funds provided for financially assisted activities.
Recipients must adhere to different Federal agency match requirements (e.g., valuation)	Cost sharing and matching funds	Many restrictions exist on cost sharing and matching funds, and unless otherwise authorized by law, Federal funds cannot be matched with other Federal funds.
Local communications budgets are decreasing, which affects project priorities	Supplanting	Federal financial assistance recipients must use Federal funds only as originally stipulated, and may not: <ul style="list-style-type: none"> – Use state or local funds that have already been funded or budgeted for the same purpose – Defray any costs that they are already obligated to pay
Difficult to maintain institutional knowledge without adequate funding to address needs past the period of performance	Funding and sustaining personnel	Many programs limit the level of Federal funding that can be allocated to personnel and require recipients to explain how positions will be sustained after the funding expires.
Grantees must ensure that procurements are fair and competitive	Compliance with Federal procurement requirements	Grantees are required to have written procurement policies ⁹ in place, are encouraged to follow the same policies and procedures they use for procurement with non-Federal funds, and should include any clauses required by the Federal government. The following are key procurement tenets when using Federal funds: <ul style="list-style-type: none"> – Procurement transactions should be conducted to ensure open and free competition – Grantees/subgrantees should avoid non-competitive practices (e.g., contractors that developed the specifications for a project should be excluded from bidding) – Grantees/subgrantees may not supplant, or replace, non-Federal funds that are already budgeted or funded for a project
Project implementation delays (e.g., construction) affect periods of performance	Period of performance	Recipients may have difficulty completing projects in the time given due to various challenges, including lengthy reviews and approval processes of project plans, zoning, permitting, environmental, and historic preservation issues.

⁹ Federal procurement requirements originate from OMB common rules. However, each Agency currently has its own specific procurement requirements and Federal program managers should obtain those procurement requirements before developing grant guidance language.

Challenge	Issue	Overview
<p>Increased focus on new and advanced technologies will shift funding in the future from traditional LMR systems to next-generation technology systems (i.e., broadband)</p> <ul style="list-style-type: none"> – Need to maintain mission-critical voice communications provided through current LMR systems. 	<p>Sustainability</p>	<p>Federal agencies should be aware that public safety agencies will continue to utilize LMR systems for mission-critical voice communications now and beyond the build-out of the Public Safety Broadband Network. The ECPC supports this “dual-path” strategy in grants as well. It recommends that agencies sustain funding for current LMR systems, and allow for investment in broadband and emerging technologies until the two technologies can seamlessly converge and function as one. The intent is to move the Nation toward greater interoperability through the development of the Public Safety Broadband Network, while ensuring that state and local public safety agencies can continue to communicate as needed, on demand, and as authorized, across all levels of government and all disciplines.</p>

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APPENDIX A—RECOMMENDED LANGUAGE FOR NATIONAL PRIORITIES, POLICIES, AND TECHNICAL STANDARDS¹

700 MHz NATIONWIDE PUBLIC SAFETY BROADBAND NETWORK

Sponsoring Agencies: The Federal Communications Commission (FCC), in collaboration with the Public Safety Communications Research (PSCR) program

Background

Numerous activities are under way to foster the development, deployment and operation of an interoperable Nationwide Public Safety Broadband Network (NPSBN) in the 700 megahertz (MHz) band, which would address a key finding from the 9/11 Commission Report². To succeed, such a network must accomplish a number of objectives. Specifically, it must: (1) deliver broadband communications meeting public-safety grade service levels for reliability and security; (2) enlist the trust of public safety agencies that will migrate traffic to this new network; (3) enable nationwide seamless interoperable communications between public safety agencies and jurisdictions; (4) provide a platform for a wide range of affordable equipment and applications; and (5) rest, to the largest extent possible, on a commercial platform that can evolve to take advantage of technological advances on a cost-effective basis.

This Priority is intended for use by Federal Program Managers developing program requirements for grantees, along with their vendors, who are subject to a FCC waiver for an early build-out of 700 MHz public safety deployments, or who expect to be subject to such a FCC waiver during the program's period of performance. Current activities are likely to shape the ultimate framework of such a Network, including Administration initiatives, pending legislation in Congress, and FCC rulemakings.³ Federal program managers should be aware that the ECPC may release updated information or recommendations if legislation is enacted or as regulations concerning network objectives and requirements are implemented. Such updates will be provided through the ECPC Clearinghouse and/or Information Bulletins to Agency leadership and ECPC members.

As part of the FCC's current efforts to enable the deployment and operation of this network and facilitate network interoperability, it has recognized the need for a common technical and operational framework to ensure that public safety broadband operations are interoperable on a nationwide basis. As a first step in enabling interoperability, the FCC adopted Long Term Evolution (LTE) as the required air interface for public safety broadband network operations at 700 MHz.⁴

¹ For all priorities and policies pertaining to equipment purchases, the Federal Program Manager should adhere to procurement documentation standards. For more information on procurement documentation, please see Table 7-Potential Financial and Programmatic Issues

² The 9/11 Commission Report states that during the 2001 terrorist attack on the World Trade Center, some Port Authority Police Department (PAPD) commands lacked interoperable radio frequencies. As a result, there was no comprehensive coordination of PAPD's overall response. The 9/11 Commission Report, *Heroism and Horror*, 292-293 (July 22, 2004).

³ See, for example, the American Jobs Act of 2011 (<http://www.whitehouse.gov/sites/default/files/omb/legislative/reports/american-jobs-act.pdf>); H.R.607 - Broadband for First Responders Act of 2011; S.1040- Broadband for First Responders Act of 2011; S.911 – Public Safety Spectrum and Wireless Innovation Act; and, the FCC's Public Safety and Homeland Security Bureau website at <http://transition.fcc.gov/pshs/public-safety-spectrum/700-MHz/safetyband.html>.

⁴ Specifically, the FCC designated the use of LTE, at least 3GPP Standard, Evolved Universal Terrestrial Radio Access (“E-UTRA”) Release 8 (“LTE”), and associated Evolved Packet Core (“EPC”) by those waiver jurisdictions. See Service Rules for the 698-746, 747-762 and 777-792 Bands; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, WT Docket No. 06-150, PS Docket No. 06-229, FCC Third Report and Order and Fourth Notice of Proposed Rulemaking, ¶ 10 (Released Jan. 26, 2011) (Third Report and Order and Fourth FNPRM). LTE is the next generation wireless advancement of the current third generation (3G) Global System for Mobile Communications (GSM) cellular standard. This technology is designed to transmit data wirelessly through a standard Internet Protocol platform projected at download speeds of

Designating LTE as the required air interface for public safety broadband is important because of the recent large-scale investment of Broadband Technology and Opportunities Program (BTOP) funds to some of the jurisdictions that have obtained waivers from the FCC authorizing early deployment in the 700 MHz public safety broadband spectrum, and which are required to use LTE for those deployments.⁵ Supporting this common air interface will promote interoperability among Federally-funded investments, and allow the Federal government to coordinate investments across grant programs.

Federal agencies should require that grantees proposing 700 MHz public safety broadband investments have obtained the necessary FCC authorization to operate in the 700 MHz broadband spectrum and that their projects are compliant with the regulations adopted by the FCC to ensure interoperability (and/or any subsequent orders and rules issued by the FCC to ensure nationwide compatibility and interoperability). To ensure compliance, Federal agencies can ask grantees to demonstrate how their investments comply with the FCC's regulatory requirements. Federal agencies also can include these regulations in grant guidance or attach these standards to individual grant agreements.

Additionally, Federal program managers should be aware that the PSCR Program has initiated a 700 MHz Public Safety Broadband Demonstration Network at Commerce's Institute for Telecommunication Sciences (ITS) laboratories in Boulder, Colorado. The goal of the Demonstration Network is to provide a vendor-neutral environment where public safety, industry, and Federal agencies can test equipment for the 700 MHz public safety broadband network. The FCC has required all jurisdictions that were granted waivers for early build-out of 700 MHz deployments, along with their vendors, to participate in the Demonstration Network.⁶ Federal agencies awarding funds for public safety broadband deployments should refer grantees to the PSCR Program and encourage their grantees to participate in these PSCR activities.⁷

The NPSTC Broadband Working group is another nationwide forum in which requirements for the public safety broadband network are currently being developed. Grantees should be encouraged to participate in these NPSTC activities; however, when Federal program managers develop grant guidance for their programs, they should be aware that the FCC's rules or orders may differ from requirements that may have been recommended by NPSTC or other groups.

Recommended Language

[Program] requires grantees interested in developing a public safety broadband network in the 700 MHz band in their jurisdictions to comply with the FCC's rules, requirements, and orders pertaining to broadband operations in the 700 MHz public safety band. Grantees should be required to provide information on how the investment will achieve interoperability with other public safety networks, including demonstration of how the project meets FCC interoperability requirements.

[Program] encourages grantees within waiver jurisdictions to align their project plans with the objectives of the PSCR program. Please find more information on PSCR activities at http://www.pscr.gov/projects/broadband/broadband_about.php

[Program] encourages supporting statewide plans to improve interoperability and coordination across jurisdictions and disciplines when developing broadband project

Megabits per second (Mbps). LTE networks can permit the transmission of data intensive services like high definition streaming video or complex mapping tools with minimal delays to the user. Mobile telecommunication carriers are globally adopting LTE to improve upon their existing 3G networks.

⁵ BTOP website: <http://www2.ntia.doc.gov/>

⁶ For more information, please see the 700 MHz Public Safety Broadband Demonstration Network section of this document.

⁷ For more information, please see the PSCR website at <http://www.pscr.gov>.

proposals. Projects should be compatible and interoperable with planned/ongoing initiatives to improve access to, and use of, broadband service by public safety agencies.

FCC rules require that all jurisdictions granted waivers for early deployment participate in the PSCR program. One of the goals of this program is the development of a nationwide broadband architecture which will promote interoperable public safety communications throughout the United States in the most efficient and cost-effective way possible. [Program] grantees are encouraged to align their project plans with these objectives. Grantees should also take advantage of innovative, cost-effective arrangements that will help maximize resources and facilitate interoperability. Example of such arrangements are: use of a single public land mobile network identifier to facilitate interoperability and eliminate the need for roaming among public safety jurisdictions; hosted cores in lieu of independent core networks; commercial standards-based equipment; aggregating demand among several jurisdictions for such equipment to achieve economies of scale; and public/private partnerships for sharing existing infrastructure.

Resources

- Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band, PS Docket 06-229: <http://www.fcc.gov/rulemaking/06-229> h
- FCC Tech Topic 22: Application of Emerging Wireless Broadband Technology for Public Safety Communications: <http://www.fcc.gov/pshs/techttopics/techttopics22.html>
- National Broadband Plan: <http://www.broadband.gov/>
- National Telecommunications and Information Administration (NTIA) Comments Regarding Implementing a Nationwide Broadband Interoperable, Public Safety Network in the 700 MHz Band: <http://www.ntia.doc.gov/category/grants>
- The Benefits of Transitioning to a Nationwide Wireless Broadband Network: <http://www.whitehouse.gov/sites/default/files/uploads/publicsafetyreport.pdf>
- Public Safety 700-MHz Demonstration Network: http://www.pscr.gov/projects/broadband/700mhz_demo_net/700mhz_ps_demo_net.php
- National Public Safety Telecommunications Council, 700 MHz Broadband Requirements Task Force: <http://www.npstc.org/broadband.jsp>
- DOC National Institute of Justice Radio Spectrum Fact Sheet: <http://www.nij.gov/nij/topics/technology/communication/radios/radio-spectrum.htm>

Contact

For more information or guidance on 700 MHz Public Safety Broadband Network, please contact the:

- FCC’s Public Safety and Homeland Security Bureau, at PSHSBinfo@fcc.gov
- PSCR, at 700demo@lists.its.bldrdoc.gov
- Broadband Technology Opportunities Program, at btop@ntia.doc.gov

800 MHz REBANDING

Sponsoring Agency: FCC

Background

In July 2004, the FCC ordered the reconfiguration of the 800 MHz band to migrate incompatible technologies that were interfering with emergency responders' communications. The reconfiguration (also known as rebanding) of the 800 MHz band will reduce radio interference by relocating high-site Land Mobile Radio (LMR) systems used by public safety and some commercial licensees to the lower portion of the 800 MHz band and relocating low-site systems that use cellular architecture to the upper portion of the band. Sprint Nextel is the primary cellular operator in the 800 MHz band, and is required to pay the relocation costs incurred by public safety to obtain comparable facilities. The FCC established an independent 800 MHz Transition Administrator (TA) to oversee the rebanding process and set a 36-month period for the transition, beginning on June 27, 2005, and ending on June 26, 2008. However, the FCC has granted waivers of this deadline to numerous public safety agencies and has yet to complete the rebanding process. It is anticipated that most rebanding in non-border areas will be completed by the end of 2012, but some licensees will require more time, and there are different rebanding timelines for the US-Canada and US-Mexico border areas (discussed below).

Federal agencies should be aware of the rebanding process and Sprint's obligation to pay public safety rebanding costs when awarding funds to emergency communications projects that involve the 800 MHz band.

- Granting agencies should coordinate with the FCC on 800 MHz-related projects, and require grantees to ensure that Federally-funded projects do not interfere with the rebanding process.
- The FCC required Sprint Nextel to compensate relocating licensees for all reasonable expenses, including planning, legal, engineering, and equipment costs. Federal agencies should ensure that Federal funds are not being used for costs covered by Sprint Nextel.
- 800 MHz facilities along international borders are significantly affected by rebanding. The new 800 MHz band plan requires revisions to international agreements between the United States, Canada, and Mexico. The FCC and Department of State have completed negotiations with Canada regarding the U.S.-Canada border 800 MHz band plan, and rebanding in the US-Canada border area is ongoing. The U.S. and Mexico are still negotiating a U.S.-Mexico border band plan, so rebanding in the U.S.-Mexico border region has not yet commenced.

To support the FCC's efforts, Federal agencies can:

- Coordinate with the FCC during the review and implementation of these projects to ensure that projects do not impair or impede rebanding efforts.
- Require grantees to coordinate with state officials (e.g., Statewide Interoperability Coordinators) to ensure that projects do not impair or impede rebanding efforts.
- Request information from the grantee on the status of rebanding to ensure that the project does not impair or impede the rebanding process, or will not be unduly delayed by the rebanding process.

Recommended Language

[Program] requires that projects not interfere with 800 MHz rebanding. [Agency] worked with the FCC to include the following requirements in its application instructions, which allowed [agency] to determine whether the project would interfere with the rebanding efforts. Grantees were required to provide, as part of the Project Overview, the following information:

1. Provide or describe the following:

A statement of whether the proposal complies with the rules of the FCC, including all applicable FCC rebanding rules and orders; if the proposal does not comply, include:

- The specific rule(s) with which the proposal does not comply.
 - The date on which a request for rule(s) waiver was filed with the FCC (include a copy of such waiver request and the response from the FCC, if any). Grant applicants are advised that the FCC cannot waive international treaties or agreements.
2. For projects involving 800 MHz in border regions, explain how the proposed project will not have any impact on the 800 MHz rebanding process occurring along the border.
- Any potential sub-recipient along the U.S.-Canada border that is an 800 MHz licensee subject to rebanding must establish before filing the application that:
 - The project proposed in the [program] application will have no impact on the timing or anticipated cost of rebanding.
 - The sub-recipient has begun negotiating with Sprint Nextel either for a Planning Funding Agreement (PFA) or a Frequency Relocation Agreement (FRA).
 - Any potential sub-recipient along the U.S.-Mexico border that is an 800 MHz licensee subject to rebanding must establish before filing the grant application that its participation will have no impact on the timing or anticipated cost of rebanding.

Resources

- FCC 800 MHz rebanding website: <http://www.fcc.gov/pshs/public-safety-spectrum/800-MHz/reconfiguration.html>
- 800 MHz Transition Administrator (TA): <http://www.800ta.org/>

Contact

For more information on the 800 MHz transition, contact the Transition Administrator at comments@800TA.org.

AUTHORIZED EQUIPMENT LIST (AEL)

Sponsoring Agency: Department of Homeland Security (DHS)

Background

The Authorized Equipment List (AEL) is a generic list of equipment developed by DHS Federal Emergency Management Agency (FEMA) Grant Programs Directorate (GPD) located on the FEMA's Responder Knowledge Base (RKB) website. The AEL defines specific equipment that is allowable under each grant. There are 22 categories of equipment from which the grant administrator can choose, including Interoperable Communications Equipment, and information on standards that grantees can use when developing procurement agreements. The AEL is used by grantees to determine whether certain equipment is allowable under a specific grant program and which standards are required under the program. Some agencies are leveraging the AEL to track equipment purchased by asking grantees to align purchases to categories in the AEL (e.g., Base Radio, Mobile Radio, Satellite Phone, and Mobile Command Vehicle).

Federal agencies are encouraged to review the AEL for programs with similar missions before developing authorized equipment lists for their programs. Equipment not on the AEL, including new and emerging technologies, can be added to the list and approved for grant mission. FEMA will, on a case-by-case basis, review the written justification(s) of grantees. Approval for acquisition does not automatically allow the equipment in question onto the AEL. Federal agencies are encouraged to work with FEMA to ensure allowable costs are consistent across Federal grant programs, to post allowable cost lists on the RKB, and to reference the AEL in grant guidance and funding opportunity announcements, if applicable.

Recommended Language

Allowable equipment and equipment standards for the [program] are listed on the web-based version of the AEL and the broader RKB, at <https://www.rkb.us>. Unless otherwise stated, equipment must meet all [mandatory, regulatory, and/or [agency]-adopted] standards to be eligible for purchase using these funds. In addition, grantees will be responsible for obtaining and maintaining all necessary certifications and licenses for the requested equipment to ensure compliance with technical standards and requirements.

Resources

- FEMA RKB website: <https://www.rkb.us>
- AEL website: <https://www.rkb.us/mel.cfm?subtypeid=549>

Contact

For information on the FEMA RKB, please contact RKBmailbox@us.saic.com.

COMMUNICATIONS UNIT LEADER (COML)

Sponsoring Agency: DHS

Background

The Communications Unit Leader (COML) is a position under the Logistics Section of the Incident Command System (ICS) (see pages 57-58 of the National Incident Management System [NIMS], which is available at http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf). The COML reports directly to the Logistics Chief or Incident Commander. A COML's responsibilities include developing plans for the effective use of incident communications equipment and facilities, managing the distribution of communications equipment to incident personnel, and coordinating the installation and testing of communications equipment. The COML will supervise other members of the Communications Unit such as the Communications Technician (COMT), Radio Operator (RADO), and Incident Communications Center Manager (INCM), if those positions are filled during an incident. The COML may also supervise volunteer communicators, if available, such as the amateur radio emergency communications support team.

The All-Hazards Type III Communications Unit Leader course trains emergency responders to be COMLs during all-hazards emergency operations, significantly improving communications across the multiple disciplines and jurisdictions responding to an incident. COML training is a step in qualifying emergency responders to lead ICS communications units, including knowledge of local communications, communications systems, and state, regional, and local communications plans. Federal agencies can list communications-specific training as an eligible activity, and can fund COML training (including train-the-trainer courses, as well as individual training).

Recommended Language

[Program] funds may be used to support communications-specific training such as COML training which will qualify emergency responders to lead ICS communications units if they possess the necessary prerequisites, including knowledge of the following: local communications; communications systems; and regional, State, and local communications plans. Funding for COML may include training workshops and conferences requiring planning, meeting space, general meeting costs, facilitation costs, materials and supplies, travel costs, and training development. After the completion of COML training, responsibilities will include developing plans for the effective use of incident communications equipment and facilities, managing the distribution of communications equipment to incident personnel, and coordinating the installation and testing of communications equipment.

Resources

- DHS website: <http://www.training.fema.gov/EMICourses/EMICatalog.asp>
- NIMS: http://www.fema.gov/pdf/emergency/nims/NIMS_core.pdf
- COML Fact Sheet: <http://www.training.fema.gov/contactus/#rc>

Contact

For more information on COML, please contact NETC-admissions@dhs.gov.

HOMELAND SECURITY EXERCISE AND EVALUATION PROGRAM (HSEEP)

Sponsoring Agency: DHS

Background

The Homeland Security Exercise and Evaluation Program (HSEEP) is a capability and performance-based exercise program that provides a standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning. HSEEP also provides tools and resources to facilitate the management of self-sustaining exercise programs through its website https://hseep.dhs.gov/pages/1001_HSEEP7.aspx.

HSEEP helps to ensure that Federally-funded exercises are well-designed and well-executed. HSEEP provides Federal agencies with after-action reports (AAR), which help to verify exercises were conducted, validate outcomes, and identify gaps in policies, plans, procedures, training, equipment, assumptions, and interagency agreements. Recipients and agencies can use AAR/improvement plans (to develop priorities for improvement and funding).

Federal agencies are adopting HSEEP and requiring Federal grant recipients to apply HSEEP guidance to grant-funded exercises. Under HSEEP, grantees must:

- Develop and maintain an annual training and exercise plan workshop and multi-year training and exercise plan, to include use of the National Exercise Schedule
- Plan and design exercises in accordance with HSEEP Volumes I-IV to include the development of documentation and follow planning timelines
- Develop and submit an AAR or Improvement Plan
- Implement action items identified in the Improvement Plan

Federal agencies have required grantees to implement exercises in accordance with HSEEP requirements, by inserting the requirement in grant guidance and grant agreements.

Recommended Language

Exercises conducted with *[program]* funds should be managed and executed in accordance with the HSEEP. HSEEP Guidance for exercise design, development, conduct, evaluation, and improvement planning is located at <https://hseep.dhs.gov>.

Resources

- HSEEP website: <https://hseep.dhs.gov>

Contact

For more information on HSEEP, please contact hseep@dhs.gov.

NARROWBANDING

Sponsoring Agency: FCC

Background

In 2004, as part of a national initiative to improve spectrum efficiency, the FCC mandated that by January 1, 2013, all public safety licensees operating in the 150-174 MHz and 421-512 MHz bands must migrate from 25 kilohertz (kHz) bandwidth channel operations to 12.5 kHz or narrower channels, or employ a technology that achieves the narrowband equivalent of one channel per 12.5 kHz of channel bandwidth for voice and transmission rates of at least 4800 bits per second per 6.25 kHz for data systems operating with bandwidths greater than 12.5 kHz.

To assist state, regional, local, and tribal governments in achieving this mandate, many grants that fund interoperable communications (e.g. DHS grants) now allow grantees to use funds for narrowbanding-related activities, such as:

- Development of narrowbanding plans
- Assessment of narrowband compliant assets and capabilities
- Implementation of training activities associated with the narrowband transition
- Replacement of non-narrowband compliant equipment
- Reprogramming of existing equipment to comply with the narrowbanding mandate

Federal agencies are urged to remind grantees of the narrowbanding mandate in their grant guidance. Federal agencies can encourage grantees to: invest in planning and equipment that will ensure compliance with by the January 1, 2013, deadline, allow costs related to narrowbanding, and provide links to resources on narrowbanding in grant guidance. Federal agencies are also encouraged to work with the FCC to ensure Federally-funded investments are compliant with the narrowbanding mandate.

Recommended Language

Grantees are encouraged to allocate grant funds to plan and implement activities that will ensure compliance with the FCC narrowbanding mandate by the January 1, 2013, deadline. The following narrowbanding-related activities are allowable under *[program]*:

- Developing plans for narrowband conversion
- Assessing narrowband compliance capabilities and narrowband-compliant assets
- Addressing gaps in coverage (including gaps associated with narrowband conversion)
- Implementing training associated with narrowband transition
- Designing and conducting exercises using equipment purchased to migrate to narrowband
- Replacing non-narrowband compliant equipment
- Acquiring/upgrading tower sites needed to comply with narrowband mandate
- Reprogramming existing equipment to comply with narrowband conversion

Resources

- FCC's narrowbanding website: <http://www.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html>
- A Practical Guide to Narrowbanding: http://www.safecomprogram.gov/NR/rdonlyres/7B1742BB-A2A7-4A2F-AF34-3654DDDA8684/0/OECNarrowbandingGuide_Final.pdf
-

Contact

For more information on narrowbanding, please contact the FCC at narrowbanding@fcc.gov.

NATIONAL BROADBAND PLAN

Sponsoring Agency: FCC

Background

In early 2009, Congress directed the FCC to develop a National Broadband Plan to ensure every American has “access to broadband capability.” Congress also required that this plan include a detailed strategy for achieving affordability and maximizing use of broadband to advance “consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.” Pursuant to this directive, the FCC issued the National Broadband Plan in March 2010.

Chapter 16 of the National Broadband Plan is dedicated to public safety. Recommendations include promoting public safety wireless broadband communications, promoting cybersecurity and the protection of critical broadband infrastructure, and encouraging innovation in the development and deployment of Next Generation 911 (NG 911) networks and emergency alert systems.

Federal managers administering programs that fund broadband technologies should ensure that access, affordability, and the national purposes defined by the FCC are advanced by the program. For more information on this plan, please visit: <http://www.broadband.gov/plan/>.

Recommended Language

[Program] allows expenses related to broadband technologies that promote the goals of the National Broadband Plan. Allowable costs include:

- The purchase of Interoperable Communications Equipment and technologies such as VoIP bridging or gateway devices
- Equipment to support the buildout of wireless broadband networks in the 700 MHz public safety band under the FCC Waiver Order

Grantees interested in developing a public safety broadband network in the 700 MHz band in their jurisdictions must adhere to the technical standards set forth in the FCC Waiver Order, or any succeeding FCC orders, rules, or regulations pertaining to broadband operations in the 700 MHz public safety band.

Resources

- National Broadband Plan: <http://www.broadband.gov>

Contact

For more information or guidance on the Nationwide Broadband Plan, please contact the FCC at fccinfo@fcc.gov.

NATIONAL EMERGENCY COMMUNICATIONS PLAN

Sponsoring Agency: DHS

Background

The National Emergency Communications Plan (NECP) is the Nation's first strategic plan to improve emergency response communications. It complements overarching existing homeland security and emergency communications strategies, including the National Response Framework, National Incident Management System, National Preparedness Guidelines, and Target Capabilities List.

The NECP seeks to ensure operability, interoperability, and continuity of communications to allow emergency responders to communicate as needed, on demand, and as authorized at all levels of government and across all disciplines.

The NECP emphasizes emergency communications governance, planning, technology, training and exercises, and supports disaster communications capabilities. The plan includes recommendations and milestones for improving emergency communications and response time over the next five years.

DHS requires states to align Statewide Communication Interoperability Plans (SCIP) to the NECP. States are required to have an approved SCIP in place in order to receive grant funding, and are required under most DHS grants to explain how projects align to the SCIP. By requiring states to align projects to SCIPs, and SCIPs to the NECP, DHS is ensuring that Federal funds support both state needs and national goals—a grants best practice.⁸

All agencies can leverage the SCIPs and the NECP to ensure that Federally-funded emergency communication projects support national goals.

Recommended Language

All emergency communications projects funded by [program] should should promote the goals of this plan and fund major initiatives such as:

- Updating and implementing the SCIPs and other state and regional assessments
- Ensuring that state and regional plans align with the goals and objectives of the NECP, support the SCIPs, and are fully coordinated with the full-time Statewide Interoperability Coordinator (SWIC)

Resources

- NECP: http://www.dhs.gov/xlibrary/assets/national_emergency_communications_plan.pdf

Contact

For more information on the NECP, please contact OEC at oe@dh.gov.

⁸ Guide to Opportunities for Improving Grant Accountability: <http://www.epa.gov/oig/dwg/reports/dwg-grants.pdf>.

NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)

Sponsoring Agency: DHS

Background

National Incident Management System (NIMS) is a framework for coordinating emergency preparedness and incident management among Federal, state, local, and tribal response agencies. NIMS affords several benefits for the emergency response community, such as:

- Establishing standardized incident management processes, protocols, and procedures that all Federal, state, local, and tribal responders will use to coordinate and conduct response
- Recognizing the role that non-governmental organizations (NGO) and the private sector have in preparedness and response
- Facilitating cooperation and coordination among responders
- Ensuring the efficient distribution of resources
- Integrating best practices and lessons learned from previous incidents

Federal agencies should know that NIMS is a required Federal policy. Under Homeland Security Presidential Directive (HSPD) 5, Federal agencies are required to use NIMS in their own incident management as well as in all actions taken to assist state, local, and tribal governments (including grant activities). State, local, and tribal entities must adopt NIMS as a condition of grant funding. Therefore, granting agencies must ensure that grantees are aware of and compliant with this Federal requirement.

The adoption of NIMS across Federal, state, local, and tribal entities ensures that the Nation has a standardized approach to incident management. It facilitates cooperation and coordination among first responders, and helps to ensure the efficient distribution of resources. Lastly, NIMS integrates best practices and lessons learned from previous incidents, driving the entire Nation toward continuous improvement of readiness and response.

Recommended Language

NIMS Implementation

In accordance with HSPD-5, *Management of Domestic Incidents*, the adoption of the NIMS is a requirement to receive Federal preparedness assistance, through grants, contracts, and other activities. The NIMS provides a consistent nationwide template to enable all levels of government, tribal nations, NGOs including voluntary organizations, and private sector partners to work together to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity.

NIMS implementation current requirements must be considered prior to the allocation of any Federal preparedness awards. In April 2009, the National Integration Center Incident Management Systems Integration (IMSI) Division advised state and local governments and tribal entities to respond to metric assessments and a list of objectives in which progress and achievement are assessed in the National Incident Management System (NIMS) Compliance Assistance Support Tool (NIMSCAST) – a web-based tool used to assess compliance with HSPD-5. 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>.

All state, local, and tribal government grantees should update their respective NIMSCAST assessments and, if necessary, submit a Corrective Action Plan via the NIMSCAST website. Corrective Action Plans are required only if a jurisdiction fails to

meet one of the NIMS implementation activities. Comprehensive information concerning NIMS implementation for states, local governments, tribal nations, NGOs, and the private sector is available through the National Integration Center (NIC) at FEMA's NIMS Resource Center at <http://www.fema.gov/emergency/nims>.

State, local, and tribal governments should continue to implement NIMS training guidance, course curricula and instructor qualifications, contained in the *Five-Year NIMS Training Plan*, released in February 2008, and any successor guidance released by FEMA. [Note: Coursework and training developed and/or delivered by National Wildfire Coordinating Group (NWCG) meet the course and instructor requirements of 50 the Five Year NIMS Training Plan]. NIMS training guidance is available on FEMA's NIMS Resource Center at <http://www.fema.gov/emergency/nims/NIMSTrainingCourses>.

The primary grantee of *[project]* is responsible for determining if sub-awardees have demonstrated sufficient progress in NIMS implementation to disburse awards.

Resources

- NIMS Resource Center, <http://www.fema.gov/emergency/nims>

Contact

For more information on NIMS, please contact FEMA-NIMS@dhs.gov.

NATIONAL INFORMATION EXCHANGE MODEL (NIEM)

Sponsoring Agency: DHS and the Department of Justice (DOJ)

Background

National Information Exchange Model (NIEM) is a framework established by DHS and DOJ to enable streamlined and secure information sharing of data among Federal, state, local, and tribal agencies, and with private sector entities. NIEM allows disparate systems to share, exchange, accept, and translate information in an efficient manner. All 50 states use NIEM in some capacity and at differing levels of maturity.

Federal agencies can require their grantees to use the latest NIEM specifications and guidelines regarding the use of information exchange standards, such as the NIEM XML namespaces, for all grant awards.

For more information on NIEM, visit: <http://www.niem.gov>.

Recommended Language

[*Program*] requires projects that funded systems, developmental activities, or services related to emergency response information sharing should leverage the NIEM for data component or element standards. In addition, NIEM has developed specific guidance for grantees, which can be found at: <http://www.niem.gov/grants.php>

Resources

- NIEM website: <http://www.niem.gov>
- SAFECOM Emergency Communications Grants website: <http://www.safecomprogram.gov/SAFECOM/grant/default.htm>

Contact

- For technical information or help with NIEM please contact nisshelp@ijis.org.
- For all other inquires about NIEM or the NIEM Web site, please contact information@niem.gov.

NATIONAL INFRASTRUCTURE PROTECTION PLAN (NIPP)

Sponsoring Agency: DHS

Background

The National Infrastructure Protection Plan (NIPP) provides a single structure and approach to protect the nation's critical infrastructure and key resources (CIKR) during terrorist attack, natural disasters or other emergency events.

The overarching goal of the NIPP is to build a safer, more secure, and more resilient Nation by preventing, deterring, neutralizing, or mitigating the effects of deliberate efforts by terrorists to destroy, incapacitate, or exploit elements of our nation's CIKR and to strengthen national preparedness, timely response, and rapid recovery of CIKR in the event of an attack, natural disaster, or other emergency.

The Federal government has developed networks and partnerships to facilitate information sharing among agencies, in order to assess risk and protect critical assets. The NIPP provides strategies, priorities, and sector-specific recommendations to protect critical assets and to ensure resiliency in the event of disaster. Federal program managers may want to consult with the NIPP team to prioritize funding that addresses gaps in infrastructure protection; to validate local risk assessments; or to collaborate with other Federal, state, local, tribal and private entities engaged in infrastructure protection planning.

Federal agencies should support activities that help grantees secure critical infrastructure and key resources, and encourage grantees to leverage the NIPP when developing localized plans to protect critical infrastructure, including the Communication Sector Specific Plan available on the NIPP website.

Recommended Language

All emergency communications projects funded by [program] should support the goals and objectives of the NIPP, including the development and implementation of homeland security support programs and national initiatives including, but not limited to, the implementation of the NIPP and associated Sector Specific Plans.

Resources

- NIPP website: <http://www.dhs.gov/nipp>

Contact

For more information on the NIPP, please contact nipp@dhs.gov.

NATIONAL RESPONSE FRAMEWORK (NRF) EMERGENCY SUPPORT FUNCTION (ESF) #2 – COMMUNICATION

Sponsoring Agency: DHS

Background

The National Response Framework (NRF) details how the Nation conducts all-hazards response—from the smallest incident to the largest catastrophe. The Emergency Support Functions (ESF) Annexes provide protocols for specific areas of response (e.g., firefighting, emergency management, transportation) and are the primary mechanisms used by emergency responders to organize response and provide assistance at the operational level. ESF Annex #2—Communications supports the restoration of the Nation’s communications infrastructure, facilitates the recovery of systems and applications from cyber attacks, and coordinates Federal communications support to response efforts during incidents requiring a coordinated Federal response.

Federal agencies should review the NRF, refer to the NRF in their guidance kits, and fund expenses such as planning, training, and exercises related to ESF #2. Promoting standardized response mechanisms enables State and local agencies to organize an effective response to local disasters, and seamlessly assist during large-scale disasters.

Recommended Language

[Program] allows project expenses related to the integration of the NRF into planning, training and exercises. All costs for training and exercises conducted with *[Program]* funds should support the development and testing of the jurisdiction’s Emergency Operations Plan or specific annexes and validation of completed corrective actions from previous exercises or real world events, where applicable. Allowable costs include:

- Planning costs related to developing or enhancing existing catastrophic incident response and recovery plans that align to the ESF and Annexes, and include and integrate Federal assets provided under the NRF
- Cost of communication-specific training, including the Emergency Management Institute’s Independent Study (IS-802), related to Emergency Support Function (ESF) #2—Communications is allowable under *[program]*

Resources

- Emergency Management Institute’s website: <http://training.fema.gov/EMI/>
- ESF Annex #2—Communications: <http://www.fema.gov/pdf/emergency/nrf/nrf-esf-02.pdf>
- NRF Fact Sheet: <http://www.fema.gov/pdf/emergency/nrf/NRFOnePageFactSheet.pdf>

Contact

For more information about the EMI independent study training, please contact Independentstudy@dhs.gov.

NG911 MIGRATION PLAN AND STANDARDS

Sponsoring Agency: Department of Transportation (DOT)

Background

In the *New and Emerging Technologies 911 Improvement Act of 2008 (NET 911 Improvement Act)*, Congress tasked the National E911 Implementation Coordination Office (ICO) to develop “a national plan for migrating to a national Internet Protocol (IP)-enabled emergency network capable of receiving and responding to all citizen-activated emergency communications and improving information sharing among all emergency response entities.” The ICO, managed jointly by the Department of Commerce’s National Telecommunications and Information Administration (NTIA) and the Department of Transportation’s National Highway Traffic Safety Administration (NHTSA), drew upon three years of research and development on Next Generation 911 (NG911) technologies, available industry resources and feedback from emergency communications stakeholders in preparing this plan, which was delivered to Congress in September of 2009.⁹

One of the most critical aspects of transforming and migrating the Nation’s public safety answering points (PSAP) from today’s legacy 911 technology to NG911 is adherence to a common set of methods and standards. Development and adoption of international standards will be key to achieving 911 interoperability across multiple national, state, regional, and local public safety jurisdictions, and beyond into the wider emergency communications environment.

A variety of standards related to the next generation of the 911 system already exist, and many more are actively under development at all levels of technology. However, there is limited coordination across the broad NG911 community regarding what standards are available and what standards still need to be established. The National 911 Program, led by the NHTSA, has compiled a list of standards activities related to NG911. This is a living document, and the National 911 Office will publish, monitor, support, and promote the activities of standards development organizations in establishing a comprehensive set of standards for NG911. Input from the standards community and NG911 stakeholders at large is encouraged and appreciated.

Federal program managers whose grant programs fund PSAPs or who are developing emergency communications systems that interface with PSAPs should consult the proposed NG 911 plan and Standards Review document. Federal agencies can work with DOT to reference applicable standards in grant guidance, require grantees to comply with the standards in the guidance as a condition of grant funding, and provide resources to grantees to encourage the use of this new technology.

Recommended Language

All emergency communications and PSAP specific projects funded by *[program]* should promote the goals of this plan and fund major NG911 initiatives.

Grantees using *[program]* funds to support emergency communications activities should comply with the standards included in the NG911 Standards Review document, including provisions on technical standards that ensure and enhance interoperable communications.

Unless otherwise stated, equipment must meet all mandatory regulatory and/or adopted standards to be eligible for purchase using these funds. In addition, agencies will be responsible for obtaining and maintaining all necessary certifications and licenses for the requested equipment.

NOTE: Despite emerging requirements for IP-enabled emergency communications services, 911 Authorities and PSAPs throughout the Nation may struggle to finance new systems while continuing to operate their current systems. Grantees should seek to ensure that funding for current systems is sustained during the development of NG911 systems and services.

⁹ A National Plan for Migrating to Internet Protocol-Enabled 911 Systems: <http://www.911.gov/911-issues/funding.html>.

Resources

- National Plan, Final Regulations for 911 Grant Program: <http://www.911.gov>
- NG911 Standards Review: A Compilation of Existing and Planned Standards for NG911 Systems. October 6, 2010. National 911 Program Standards: <http://www.911.gov/911-issues/standards.html>
- FCC Communications Security, Reliability and Interoperability Council (CSRIC)
WG4A: Best Practices for Reliable 911 and E911¹⁰ Final Reports: <http://transition.fcc.gov/pshs/advisory/csrlic/>
- WG4B: Transition to Next Generation 911: <http://transition.fcc.gov/pshs/docs/csrlic/CSRIC-WG4B-Final-Report.pdf>
- WG4C: Technical Operations for 911 Location Accuracy: http://transition.fcc.gov/pshs/docs/csrlic/CSRIC_4C_Comprehensive_Final_Report.pdf

Contact

For more information on the NG911 Standards Review or how to include NG911 standards in grants, contact the National 911 Program at: nhtsa.national911@dot.gov.

¹⁰ FINAL REPORTS: <http://transition.fcc.gov/pshs/advisory/csrlic/>

**ORGANIZATION FOR THE ADVANCEMENT OF STRUCTURED INFORMATION STANDARDS (OASIS)
EMERGENCY DATA EXCHANGE LANGUAGE (EDXL)**

Sponsoring Agency: DHS

Background

The Organization for the Advancement of Structured Information Standards (OASIS) Emergency Data eXchange Language (EDXL) is a suite of data messaging standards. Federal agencies strongly encourage grantees to comply with OASIS EDXL standards. OASIS is a not-for-profit, international consortium that promotes industry consensus and produces worldwide standards for security, cloud computing, service-oriented architecture, web services, the Smart Grid, content technologies, emergency management, eGovernment, and many other areas. This standard is important to emergency communications because compliance with EDXL facilitates information sharing among public safety agencies.

Federal agencies are strongly encouraging or requiring grantees to comply with OASIS EDXL standards, and are providing grantees with resources to do so.

Recommended Language

For projects involving data exchange technologies funded by [*Program*], proposals should conform as much as possible to the OASIS EDXL suite of data messaging standards and NIMS guidelines. Additional information on data messaging standards and their applicability may be found at <http://www.oasis-open.org>.

Resources

- OASIS website: <http://www.oasis-open.org>
- SAFECOM website: <http://www.safecomprogram.gov/SAFECOM/grant/default.htm>

Contact

For more information on EDXL please contact OEC at oe@oec.dhs.gov.

PRIORITY SERVICES

Sponsoring Agency: DHS

Background

The DHS National Communications Services (NCS) offers a wide range of national security and emergency preparedness (NS/EP) communications services that support qualifying Federal, state, local and tribal government, industry, and nonprofit organization personnel in performing their NS/EP missions. NS/EP priority telecommunications include:

- **Government Emergency Telecommunications Services (GETS)** provides emergency access and priority processing in the local and long distance segments of the public switched wireline network. It is used in an emergency or crisis situation during which the probability of completing a call over normal or other alternate telecommunication means has significantly decreased.
- **Telecommunications Service Priority (TSP)** is a program that authorizes NS/EP organizations to receive priority treatment for vital voice and data circuits or other telecommunications services. As a result of hurricanes, floods, earthquakes, and other natural or man-made disasters, telecommunications service vendors frequently experience a surge in requests for new services and requirements to restore existing services. It provides service vendors with a FCC mandate for prioritizing service requests by identifying those services critical to NS/EP. A telecommunications service with a TSP assignment is assured of receiving full attention by the service vendor before a non-TSP service.
- **Wireless Priority Service (WPS)** provides priority cellular network access. The WPS was approved by the FCC for NS/EP requirements on a call-by-call priority basis. The NCS executes the program on behalf of the Executive Office of the President. Only individuals in key NS/EP leadership positions are authorized use of WPS.

Federal agencies can encourage grantees to facilitate communication between all levels of governments, and may choose to include NCS priority services as an allowable cost under their programs.

Recommended Language

Grant funds may be used to facilitate participation in a priority service program if the organization is a Federal, state, local, and tribal police department, fire department, public safety answering point or 911 call center, EMS entity, essential health care provider or any other organization that uses telecommunication services necessary for the public health, safety, and maintenance of law and order. This includes programs designed for both priority service and call completion, such as TSP, GETS, and WPS.

Resources

- NCS Services: <http://www.ncs.gov/services.html>
- GETS brochure: http://www.ncs.gov/brochures/gets_brochure.pdf
- TSP brochure: http://www.ncs.gov/brochures/tsp_brochure.pdf
- WPS brochure: http://www.ncs.gov/brochures/wps_brochure.pdf

Contact

For more information on priority services, please contact:

- GETSat gets@ncs.gov.
- TSP at tsp@dhs.gov.
- WPS at wps@dhs.gov.
- NCS at ncsweb1@dhs.gov.

PROJECT 25 (P25) STANDARDS FOR LAND MOBILE RADIO (LMR)

Sponsoring Agency: DHS

Background

Public safety and industry have partnered through the Telecommunications Industry Association (TIA) to develop Project 25 (P25) digital LMR standards that allow equipment to interoperate regardless of manufacturer—enabling emergency responders to exchange critical communications. P25 is a partnership between the public safety community and industry to develop a suite of open architecture standards for digital LMR equipment, features, and interfaces. P25 is intended to benefit the public safety community by:

- Improving radio spectrum resource use
- Promoting marketplace competition for interoperable products
- Enabling interoperable communications within and among public safety agencies
- Providing backward compatibility
- Establishing a staged migration path

Implementation of P25 technology will happen in at least two phases:

- Phase 1, completed in 1995, standardized the radio interface
- Phase 2, still under development, updates the radio interface to be more spectrally efficient by using advanced narrowband technology.

Authorizing language for many emergency communication grants strongly encourages investment in standards-based (e.g., P25) 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 (such as procuring new portable radios for an existing analog system) will be considered if there is a compelling reason that such equipment should be purchased. Users will have to provide written justification of how the non-standard equipment will advance interoperability and how the purchase will support eventual migration to interoperable systems. Otherwise, grantees considering new radio or system acquisitions are expected to invest in standards-based equipment and migrate to P25 compliant equipment. To ensure encrypted interoperability, the P25 suite of standards references the use of Advanced Encryption Standard (AES) in the Project 25 Block Encryption Protocol, ANSI/TIA-102.AAD. Entities pursuing encrypted communications capabilities must be compliant with the P25 Block Encryption Protocol.

Most Federal agencies have recognized the need for standards-based systems, and have required compliance with the P25 standard for digital LMR investments. However, there is no single policy for granting waivers from this requirement, resulting in some inconsistency in how standards are applied. Inconsistencies in the implementation of standards may hinder interoperability. Therefore, the Emergency Communications Preparedness Center (ECPC) Grants Focus Group (GFG) is planning to review the waiver process and to develop common criteria for granting waivers. Agencies are encouraged to submit processes and criteria used to grant (or deny) waivers. Further, because waivers are granted by single agencies for specific projects, and are not collected centrally or shared across agencies, other granting agencies may not be aware that certain projects or initiatives have already been granted waivers. The ECPC GFG is seeking ways to facilitate information sharing among agencies to ensure that agencies know when a waiver has been granted, to reduce duplication of efforts by grantees, and to avoid conflicting outcomes on waivers (e.g., one agency grants a waiver for one part of a project, while another does not).

Recommended Language

Grantees must ensure that digital voice systems and equipment purchased with Federal grant funding are compliant with P25, unless otherwise noted in the grant guidance.

Grantees purchasing P25-compliant equipment must obtain documented evidence from the manufacturer that the equipment has been tested and passed all of the applicable, published, normative P25-compliance assessment test procedures for performance, conformance, and interoperability as defined in the “Grant Guidance—P25 Explanatory Addenda,” which can be found at <http://www.safecomprogram.gov/SAFECOM/grant/default.htm>.

Grant applicants are also encouraged to pursue current and next-generation interoperability solutions, such as gateways, point-to-point software solutions, and backbone technologies that connect existing radio systems. These technologies may include IP-based solutions. These solutions may provide interim or long-term interoperability capabilities that remove the need for new equipment or systems, and their implementation should not require or involve the acquisition of new, non-P25 systems. Absent compelling reasons to use other solutions, communities considering new radio or system acquisitions are expected to migrate to P25-compliant equipment.

Regardless of technology, projects should emphasize regional/consolidated equipment investments. This can be accomplished in a variety of ways, including documented P25-compliant dual-mode or digital LMR trunked systems, patches and gateways that link public safety radio systems to other systems, and innovative approaches that leverage IP-based or point-to-point software-based solutions. In any case, projects should deliver capabilities that approach the functional equivalent of a common standards-based shared system.

Resources

- TIA P25 website: http://www.tiaonline.org/standards/technology/project_25/
- P25 homepage: <http://www.project25.org>
- SAFECOM website: <http://www.safecomprogram.gov/SAFECOM/grant/default.htm>
- RKB website: <https://www.rkb.us>

Contact

For more information on P25 standards and requirements, please contact OEC at oe@dh.gov.

P25 COMPLIANCE ASSESSMENT PROGRAM (CAP)

Sponsoring Agency: DHS

Background

The P25 Compliance Assessment Program (CAP) is a voluntary program that allows P25 equipment suppliers to formally demonstrate their products' compliance with a select group of requirements by testing it in recognized labs. P25 CAP is a partnership of the DHS Command, Control, and Interoperability Division, the National Institute of Standards and Technology (NIST), industry, and the emergency response community. The P25 CAP establishes a process for ensuring that equipment complies with P25 standards and is capable of interoperating across manufacturers. The program helps emergency response officials make informed purchasing decisions.

Beginning in FY2007, *SAFECOM Guidance* has required that vendors of communications systems purchased with grant funding participate in the P25 CAP. Detailed information regarding the P25 CAP, including the DHS-recognized labs, can be found on the SAFECOM P25 CAP website.¹¹ The Supplier's Declarations of Compliance (SDoC) and Summary Test Reports can be found on the FEMA RKB website.¹² Federal agencies can access P25 CAP information through the RKB, including actual test results.

Public safety and industry have partnered through the TIA to develop P25 digital LMR standards that allow equipment to interoperate regardless of manufacturer—enabling emergency responders to exchange critical communications. The goal of P25 is to specify formal standards for interfaces between the various components of an LMR system commonly used by emergency responders. Until now, there was no compliance assessment process in place through which a recognized laboratory could confirm that equipment, advertised by manufacturers as P25-compliant, adheres to the P25 suite of standards. P25 CAP helps to ensure that P25 equipment is truly compliant to the standards, increasing confidence in interoperability, as well as performance and conformance criteria.

Grantees can use the P25 CAP Program to ensure that equipment is compliant with the P25 standard. SAFECOM recommends that grantees purchasing P25 equipment ensure the vendor has participated in equipment testing consistent with the P25 CAP Program. Where equipment is tested through the Project 25 CAP Program, and covered in the Project 25 Compliance Assessment Program Requirements document, evidence of this testing will be documented through SDoC and Summary Test Reports that have been posted to Responder Knowledge Base on <https://www.rkb.us>.

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

Recommended Language

Applicants purchasing P25 equipment with [*Program*] funds must demonstrate how their procurements will comply with these requirements. When purchasing Project 25 LMR equipment/systems, grantees will, at a minimum, ensure the vendor has participated in equipment testing consistent with P25 CAP. Where such equipment is covered in the *Project 25 Compliance Assessment Program Requirements* document, it must be tested in accordance with applicable standards and policies of the P25 CAP, and evidence of this testing must be documented through SDoCs and Summary Test Reports that have been posted to <https://www.rkb.us>. If documentation is not available through the P25 CAP, agencies must obtain documented evidence

¹¹ P25 CAP website: <http://www.safecomprogram.gov/SAFECOM/currentprojects/project25cap/>

¹² RKB website: <http://www.rkb.us>

from the manufacturer that the equipment has been tested and passed all of the applicable, published, normative, P25 test procedures for performance, conformance, and interoperability.

Resources

- SAFECOM P25 CAP:
<http://www.safecomprogram.gov/SAFECOM/currentprojects/project25cap/>.
- Laboratory Recognition Process for P25 Compliance Assessment:
http://www.safecomprogram.gov/NR/rdonlyres/0154A239-9D83-4D09-91F1-FBE11161A33F/0/NISTHandbook1532009REVEdition_16Jul09.pdf.
- Office of Emergency Communications (OEC): *FY 2010 SAFECOM Guidance*:
http://www.safecomprogram.gov/NR/rdonlyres/31A870C0-0C9D-4C29-86F8-147D61AF25CF/0/FY_2010_SAFECOM_Recommended_Guidance_111809_Final.pdf

Contact

For more information on the P25 CAP Program, contact P25cap@dhs.gov.

SAFECOM GUIDANCE ON EMERGENCY COMMUNICATIONS GRANTS

Sponsoring Agencies: DHS

Background

When procuring equipment for communications systems, whether voice or data, a standards-based approach must be used to facilitate interoperability between jurisdictions and disciplines at all levels of government, and to ensure interoperability between Federally-funded investments. As a result, many grant programs require emergency communication investments to comply with voluntary consensus standards.¹³

Through the work of SAFECOM, standards for emergency communications equipment have been developed and tested over time. Both Federal agencies and grantees have leveraged the standards in the *SAFECOM Guidance* to improve and advance interoperability.

Agencies are encouraged to review the standards and apply these standards to all grants funding emergency communications. While many agencies have adopted the technical standards in SAFECOM, many have not. Inconsistencies in the implementation and enforcement of standards may hinder interoperability. Therefore, the GFG is recommending that agencies do one or more of the following:

- Incorporate the standards directly into grant guidance
- Require that grantees comply with the standards in the *SAFECOM Guidance*
- Attach an addendum to individual grant agreements requiring grantees to comply with all applicable standards

The goal of the GFG is to promote the full adoption of the technical standards across all agencies funding emergency communications in order to ensure that Federally-funded investments are compatible and interoperable.

Recommended Language

Grantees (including sub-grantees) that are using [*program*] funds to support emergency communications activities should comply with the *FY 2011 SAFECOM Guidance*, including provisions on technical standards that ensure and enhance interoperable communications.

Resources

- *FY 2011 SAFECOM Guidance*:
http://www.safecomprogram.gov/SAFECOM/library/grant/1638_fy2011.htm.

Contact

For more information on SAFECOM, please contact OEC at oece@dhs.gov.

¹³ For example, in the 9/11 Act, Congress prohibits the DHS Secretary from awarding grants for the purchase of equipment that does not meet applicable voluntary consensus standards, unless the State demonstrates that there is a compelling reason for such a purchase.

STANDARDIZED EQUIPMENT LIST (SEL)

Sponsoring Agency: DHS

Background

The Standardized Equipment List (SEL) is provided to the responder community by the InterAgency Board (IAB) for Equipment Standardization and Interoperability. The list contains minimum equipment recommendations for response to weapons of mass destruction (WMD) incidents. The SEL includes recommended features, standards, and technical requirements for equipment that grantees can use when developing procurement agreements and operating considerations.

The SEL has traditionally contained a list of generic equipment recommended by the IAB to Federal, state, and local government organizations preparing for and responding to all chemical, biological, radiological, nuclear, and explosive (CBRNE) events. The updated version of the SEL has been broadened to address all-hazard environments, while maintaining an emphasis on CBRNE events.

The SEL is a guideline, and its use is voluntary. The SEL promotes interoperability and standardization across the response community at the Federal, state, and local levels by offering a standard reference and a common set of terminology. Federal agencies are encouraged to work with FEMA to ensure allowable costs are consistent across Federal grant programs, to post allowable cost lists on the RKB, and to reference the SEL in grant guidance and funding opportunity announcements, if applicable.

Recommended Language

All projects related to the preparation and response to incidents involving weapons of mass destruction and CBRNE events funded by *[program]*, should reference the SEL when submitting proposals.

Resources

- FEMA RKB SEL website: <https://www.rkb.us/lists.cfm>

Contact

For information on the FEMA RKB, please contact RKBmailbox@us.saic.com.

STATEWIDE COMMUNICATION INTEROPERABILITY PLAN (SCIP)

Sponsoring Agency: DHS

Background

The 9/11 Act¹⁴ directed the FEMA Administrator to require any state applying for a homeland security grant to submit a Statewide Communication Interoperability Plan (SCIP). The Act detailed the requirements for such a plan,¹⁵ and required states to submit the report and annual updates to DHS for review and approval. The 9/11 Act also required states and territories to submit annual reports on progress against the SCIP (i.e., SCIP Implementation Reports) to DHS' Office of Emergency Communications (OEC) as a condition of receiving funding.

In early 2007, DHS issued a set of criteria for the SCIPs in the *Recommended Federal Grant Guidance for Emergency Response Communications and Interoperability Grants for FY 2007*, requiring that by the end of 2007, each state must develop and adopt a SCIP as a stipulation for receiving future homeland security grant funds for communications interoperability initiatives. To date, all 56 states and territories have an approved SCIP.

SCIPs are locally-driven plans to improve emergency communications across the state and are maintained by the Statewide Interoperability Governing Body (SIGB) or the SWIC. States engage agencies and stakeholders at all levels of government, across all jurisdictions, and from all disciplines to define emergency communication needs and priorities. Together, state and local stakeholders develop a strategic vision for improving interoperability that aligns investments with the statewide plans and ensures that Federal funds are directed where needed.

Federal agencies should require grantees to align communication projects to their SCIPs and SCIP Implementation Reports to ensure that Federal investments support each state's strategic plan to improve emergency communications, and to ensure that funds address needs identified in state plans. Federal agencies can allow costs related to the development of these plans.

Recommended Language

[Program] may fund projects that enhance or update state or regional plans, including SCIPs, SCIP Implementation Reports, and Tactical Interoperable Communications Plans.

Recipients shall ensure projects support the SCIP and are fully coordinated with the full-time SWIC.

Resources

- SAFECOM link on Statewide Planning:
<http://www.safecomprogram.gov/SAFECOM/statewideplanning/>.

Contact

For more information on SCIPs, please contact OEC at oecc@dhs.gov.

¹⁴ Implementing Recommendations of the 9/11 Commission Act of 2007 (Pub. L. No. 110-53), also known as the 9/11 Act.

¹⁵ The 9/11 Act amended the Intelligence Reform and Terrorism Prevention Act of 2004 (6 U.S.C. 194(f)) to include a new section 7303 (f) which provides details on the required elements of the report.

APPENDIX B—BEST PRACTICES

The Emergency Communications Preparedness Center (ECPC) Grants Focus Group (GFG) collected best practices and recommendations that improve the effectiveness and impact of emergency communication grants from member agencies. Federal program managers should leverage the best practices and recommendations below to ensure standardized processes are provided in all financial assistance programs funding emergency communications:

- Define allowable costs
- Encourage grantees to consider regional, multi-jurisdictional, multi-disciplinary and/or cross border projects
- Require grantees to coordinate with the Statewide Interoperability Coordinator
- Require project alignment to after-action reports (AAR), Statewide Communication Interoperability Plan (SCIP), Tactical Interoperable Communications Plan (TICP), and other assessments

For more information on ECPC efforts to coordinate emergency communications investments, please contact the ECPC at ecpc@hq.dhs.gov.

DEFINE ALLOWABLE COSTS

Federal program managers may assist in outlining the costs allowable under their specific programs after reviewing authorizing or appropriations legislation. Most emergency communication financial assistance programs fund planning, training, exercises, and equipment. Sample allowable costs include

- Development or update of communication plans, such as SCIP, TICP, and narrowband plans, and the support of emergency communications positions, such as Statewide Interoperability Coordinators (SWIC), Frequency Coordinators, Communication Unit Leaders (COML)
- Communications Leader (COML) and Communications Technician (COMT) Training Courses
- Exercises related to compliance with National Emergency Communications Plan (NECP) goals or national exercises that include communication components
- Interoperable communications equipment as defined in the Federal Emergency Management Agency (FEMA) Responder Knowledge Base (RKB) or Authorized Equipment List (AEL)

ENCOURAGE GRANTEES TO CONSIDER REGIONAL, MULTI-JURISDICTIONAL, MULTI-DISCIPLINARY AND/OR CROSS BORDER PROJECTS

Federal agencies should encourage grantees to coordinate proposals with state and regional partners. Grantees should be encouraged or incentivized to develop regional, multi-jurisdictional, and multi-disciplinary projects. Applicants should consider developing projects that:

- Improve emergency communications across jurisdictions (e.g., across states or counties)
- Enables communication across jurisdictions, among disciplines, and among all levels of government
- Expands coverage to unserved or underserved areas
- Links disparate systems
- Connects local systems and responders to regional or statewide systems
- Develops regional bodies that coordinate emergency communications

Regional projects, intra-state, and/or interstate projects that include more than one jurisdiction should promote wide area interoperability and not create new barriers among responders inside and outside of the region. For example, Federal funding should not advance a proprietary-based project when an equivalent open standards solution exists.

Federal agencies should encourage funding recipients to consider how projects can promote not only intra-state communications, but also communications among international, Federal, state, local, and tribal public safety and international border agencies. Interoperability is an operational requirement that often transcends political boundaries. Federal agencies should encourage recipients located adjacent to or near international borders to consider cross-border communications when developing emergency communications-related projects.

Grantees developing cross-border projects should be required to coordinate with Federal, state, and international partners to ensure that Federally-funded activities support current efforts to improve interoperability and do not interfere with the 800 MHz rebanding¹ effort occurring along the border. Grantees should be required or encouraged to develop agreements with agencies operating along and across the border and to leverage existing resources and relationships to improve communications along and across the border.

Additionally, recipients should be reminded that Federal funding may not be allocated to international entities (unless authorized by law) and that placement of Federally-funded equipment on international property may be subject to special terms and conditions. Federal agencies should work closely with their program officers to ensure that proposed activities are allowable.

¹ For more information on the rebanding process, see FCC Frequently Asked Questions at: <http://www.fcc.gov/pshs/public-safety-spectrum/800-MHz/reconfiguration-faqs.html>

REQUIRE GRANTEES TO COORDINATE WITH THE SWIC

The SWIC, local public safety officials (e. g., law enforcement and emergency responders), and other emergency management personnel are key players in the statewide communications interoperability effort. The SWIC serves as the cornerstone of each state's interoperability effort. The SCIP point of contact is the individual responsible for maintaining the SCIP.

The SWIC and/or SCIP point of contact are responsible for coordinating development of interoperable communications capabilities and plans within a state. Coordinating emergency communications investments with the SWIC and/or the SCIP point of contact helps to ensure that investments align with state communications plans and can be incorporated into the state communications architecture and governance structure. Coordination can also secure support and awareness of the project.

Within financial assistance programs, Federal agencies are requiring that emergency communications projects be coordinated with the SWIC and/or SCIP point of contact to promote alignment with state and national emergency communications goals and objectives.

The sub-recipient(s) and State Administrative Agency (SAA) must coordinate with the SWIC or the SCIP point of contact, statewide interoperability governing body, and all relevant stakeholders to ensure support and awareness of the project.

Some emergency communications programs have begun to require applicants to attach a letter of project support from their SWIC or SCIP point of contact. At a minimum, the letter must include:

- The signatory's acknowledgment that the SAA and sub-recipient have coordinated the proposal with him or her
- Whether the proposed project is consistent with the existing SCIP, or if there is support for amending the SCIP to include the proposed project as an objective
- The signatory's support of the proposed project

REQUIRE PROJECT ALIGNMENT TO AAR, SCIP, TICP, AND FUTURE ASSESSMENTS

Federal program managers should address performance gaps identified through the SCIPs, TICP, AAR, or other assessments within financial assistance programs. Grantees are encouraged to direct funding to expand the use state and/or regional plans and future assessments reports (e.g. NECP Goals Assessment) to ensure that grantees will structure project proposals to resolve gaps in emergency communications goals. Federal agencies often use financial assistance funds to support updates to the following plans and assessments:

- **After-Action Report:** An AAR summarizes exercise events and analyzes performance of the tasks identified as important during the planning process. It also evaluates achievement of the selected exercise objectives and demonstration of the overall capabilities being validated. The improvement plan portion of an AAR addresses lessons learned from the exercise through concrete, measurable steps that result in improved response capabilities. AARs inform preparedness priorities by highlighting potential preparedness shortfalls in the areas of planning, organization, training, and equipment prior to real-world incidents. Subsequently, these priorities inform resource allocation, including training and equipment purchases, which enhance readiness, influence policy or program decisions, and become the basis for future exercises. DHS requires financial assistance recipients to report on scheduled exercises and ensure that an AAR is prepared and submitted for each exercise conducted with FEMA grant funds. Additionally, DHS encourages investments that address gaps identified in AAR and exercises to validate skills learned and to ensure gaps are closed.
- **Statewide Communication Interoperability Plan:** To date, all 56 states and territories have an approved SCIP, which outlines goals, objectives, and initiatives for enhancing interoperability statewide according to a common set of criteria. Federal program managers may require a SCIP Implementation Report, instead of a full SCIP, which reports on progress against the SCIP. Federal agencies should require grantees to align communication projects to their SCIPs and SCIP Implementation Reports to ensure that Federal investments support each state’s strategic plan to improve emergency communications, and to ensure that funds address needs identified in state plans.
- **Tactical Interoperable Communications Plan:** TICPs were developed in 2006 for all Urban Area Security Initiative (UASI) UASI sites and clearly defined the breadth and scope of interoperable assets available to outline how assets are shared; how asset use is prioritized; and the steps individual state agencies should follow to request, activate, use, and deactivate each asset. Through the development of the TICPs, the execution of validation exercises, and completion of interoperable communications scorecards,² all 75 urban/metropolitan areas have developed the following:
 - Regional communications committee (TICP requirement)
 - Regional equipment inventory (TICP requirement)
 - Regional standard operating procedures (SOP) (TICP requirement)
 - Communications focused exercise (validation exercise)
 - Identified communications gaps and recommendations (scorecard and AAR)

APPENDIX C—AGENCY FUNDING DATA

Program	Thousands of Dollars (\$000)											
	Funding	FY 2008 Total EC Funding	Equipment	Funding	FY 2009 Total EC Funding	Equipment	Funding	FY 2010 Total EC Funding	Equipment	Funding	TOTAL Total EC Funding	Equipment
<i>Department of Agriculture</i>												
Rural Development Community Connect Broadband Grants	\$ 15,684	N/A	N/A	\$ 13,386	N/A	N/A	-	N/A	N/A	\$ 29,070	-	-
Rural Development Community Facilities Programs	-	N/A	N/A	-	N/A	N/A	\$ 870,248	N/A	N/A	\$ 870,248	-	-
Weather Radio Transmitter Grant Program	\$ 196	N/A	N/A	-	N/A	N/A	\$ 110	N/A	N/A	\$ 306	-	-
Traditional Infrastructure Loans	\$ 674,966	N/A	N/A	\$ 690,000	N/A	N/A	\$ 690,000	N/A	N/A	\$ 2,054,966	-	-
Farm Bill Broadband Loans	\$ 438,475	N/A	N/A	\$ 6,042	N/A	N/A	\$ 74,297	N/A	N/A	\$ 518,814	-	-
Broadband Telecom Loans - ARRA	-	-	-	-	-	-	\$ 1,191,845	N/A	N/A	\$ 1,191,845	-	-
Broadband Telecom Grants - ARRA	-	-	-	-	-	-	\$ 2,337,246	N/A	N/A	\$ 2,337,246	-	-
Distance Learning Telemed Loans	\$ 13,093	N/A	N/A	\$ 16,266	N/A	N/A	-	-	-	\$ 29,359	-	-
Distance Learning Teleme Grants	\$ 30,149	N/A	N/A	\$ 36,288	N/A	N/A	\$ 34,707	N/A	N/A	\$ 101,144	-	-
<i>Subtotal</i>	<i>\$ 1,172,563</i>	<i>-</i>	<i>-</i>	<i>\$ 761,981</i>	<i>-</i>	<i>-</i>	<i>\$ 5,198,453</i>	<i>-</i>	<i>-</i>	<i>\$ 7,132,997</i>	<i>-</i>	<i>-</i>
<i>Department of Commerce</i>												
Broadband Technology Opportunities Program	N/A	N/A	N/A	N/A	N/A	N/A	\$ 3,940,000	N/A	N/A	\$ 3,940,000	-	-
Public Safety Interoperable Communications Grant Program	\$ 968,385	\$ 968,385	\$ 871,547	N/A	N/A	N/A	N/A	N/A	N/A	\$ 968,385	\$ 968,385	\$ 871,547
Measurement Science and Engineering Research Grants Programs: Electronics and Electrical Engineering Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-
Measurement Science and Engineering Research Grants Programs: Information Technology Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-
Measurement Science and Engineering Research Grants Programs: Physics Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-
<i>Subtotal</i>	<i>\$ 968,385</i>	<i>\$ 968,385</i>	<i>\$ 871,547</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>\$ 3,940,000</i>	<i>-</i>	<i>-</i>	<i>\$ 4,908,385</i>	<i>\$ 968,385</i>	<i>\$ 871,547</i>
<i>Department of Defense</i>												
Communications and Networking Discovery and Invention	N/A	N/A	N/A	N/A	N/A	N/A	\$ 2,000	N/A	N/A	\$ 2,000	-	-
Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology	-	-	-	-	-	-	N/A	N/A	N/A	-	-	-
<i>Subtotal</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>\$ 2,000</i>	<i>-</i>	<i>-</i>	<i>\$ 2,000</i>	<i>-</i>	<i>-</i>

Thousands of Dollars (\$000)

Program	FY 2008			FY 2009			FY 2010			TOTAL		
	Funding	Total EC Funding	Equipment	Funding	Total EC Funding	Equipment	Funding	Total EC Funding	Equipment	Funding	Total EC Funding	Equipment
<i>Department of Education</i>												
Readiness and Emergency Management for Schools	N/A	N/A	N/A	N/A	N/A	N/A	\$ 29,000	N/A	N/A	\$ 29,000	-	-
<i>Subtotal</i>	-	-	-	-	-	-	\$ 29,000	-	-	\$ 29,000	-	-
<i>Department of Health and Human Services</i>												
Hospital Preparedness Program	\$ 398,059	N/A	N/A	\$ 362,018	N/A	N/A	\$ 390,500	N/A	N/A	\$ 1,150,577	-	-
Public Health Emergency Response Grant Program	\$ 704,867	N/A	N/A	\$ 260,000	N/A	N/A	-	-	-	\$ 964,867	-	-
State Health Information Exchange Cooperative Agreement Program	-	-	-	-	-	-	\$ 564,000	N/A	N/A	\$ 564,000	-	-
<i>Subtotal</i>	\$ 1,102,926	-	-	\$ 622,018	-	-	\$ 954,500	-	-	\$ 2,679,444	-	-
<i>Department of Homeland Security</i>												
Assistance to Firefighters Grant (AFG)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Border Interoperability Demonstration Project	\$ 25,500	\$ 25,500	Pending	N/A	N/A	N/A	N/A	N/A	N/A	\$ 25,500	\$ 25,500	\$ -
Buffer Zone Protection Program	\$ 48,000	\$ 2,769	\$ 2,765	\$ 48,575	\$ 1,383	\$ 1,383	\$ 48,000	\$ 390	\$ 390	\$ 144,575	\$ 4,542	\$ 4,537
Emergency Management Performance Grant	\$ 291,450	\$ 7,703	\$ 2,333	\$ 306,023	\$ 6,243	\$ 3,136	\$ 329,800	\$ 5,325	\$ 5,301	\$ 927,272	\$ 19,271	\$ 10,770
Emergency Operations Center Grant	\$ 14,573	\$ 1,408	\$ 1,279	\$ 34,000	\$ 2,844	\$ 2,844	\$ 57,600	\$ 4,008	\$ 4,008	\$ 106,173	\$ 8,260	\$ 8,130
Driver's License Security Grant Program	-	-	-	\$ 48,575	-	-	\$ 48,000	-	-	\$ 96,575	-	-
State Homeland Security Program	\$ 861,265	\$ 209,815	\$ 191,449	\$ 861,280	\$ 224,236	\$ 202,630	\$ 842,000	\$ 198,540	\$ 187,017	\$ 2,564,545	\$ 632,591	\$ 581,095
Urban Area Security Initiative	\$ 781,630	\$ 209,020	\$ 167,492	\$ 798,631	\$ 225,873	\$ 183,565	\$ 832,500	\$ 194,891	\$ 172,533	\$ 2,412,761	\$ 629,784	\$ 523,590
Operation Stonegarden	\$ 60,000	\$ 3,451	\$ 3,451	\$ 90,000	\$ 2,981	\$ 2,981	\$ 60,000	\$ 3,164	\$ 3,164	\$ 210,000	\$ 9,596	\$ 9,596
Metropolitan Medical Response System Program	\$ 39,832	\$ 1,601	\$ 1,536	\$ 39,831	\$ 1,246	\$ 1,241	\$ 39,360	\$ 1,774	\$ 1,614	\$ 119,023	\$ 4,622	\$ 4,392
Citizen Corps Program	\$ 14,573	\$ 107	\$ 107	\$ 14,573	\$ 215	\$ 197	\$ 12,480	\$ 54	\$ 54	\$ 41,625	\$ 377	\$ 359
Freight Rail Security Grant Program	\$ 15,000	N/A	N/A	\$ 15,000	N/A	N/A	\$ 15,000	N/A	N/A	\$ 45,000	-	-
Intercity Bus Security Grant Program	\$ 11,172	N/A	N/A	\$ 11,658	N/A	N/A	\$ 11,520	N/A	N/A	\$ 34,350	-	-
Intercity Passenger Rail (Amtrak)	\$ 25,000	N/A	N/A	\$ 25,000	N/A	N/A	\$ 20,000	N/A	N/A	\$ 70,000	-	-
Interoperable Emergency Communications Grant Program	\$ 48,575	\$ 47,937	-	\$ 48,575	\$ 48,017	\$ 12,231	\$ 48,000	\$ 47,327	\$ 14,873	\$ 145,150	\$ 143,280	\$ 27,104
Mississippi Interoperable Communications Grant	\$ 20,000	\$ 20,000	\$ 19,400	N/A	N/A	N/A	N/A	N/A	N/A	\$ 20,000	\$ 20,000	\$ 19,400
Nonprofit Security Grant Program	\$ 15,000	\$ 123	\$ 123	\$ 15,000	\$ 37	\$ 37	\$ 19,000	\$ 69	\$ 69	\$ 49,000	\$ 229	\$ 229
Port Security Grant Program (PSGP)	\$ 388,600	N/A	N/A	\$ 388,600	N/A	N/A	\$ 288,000	N/A	N/A	\$ 1,065,200	-	-
PSGP Supplemental	N/A	N/A	N/A	N/A	N/A	N/A	\$ 288,000	N/A	N/A	\$ 288,000	-	-
Small Business Innovation Research Program	N/A	N/A	N/A	N/A	N/A	N/A	\$ 100	N/A	N/A	\$ 100	-	-
Transit Security Grant Program	\$ 348,600	N/A	N/A	\$ 348,600	N/A	N/A	\$ 253,000	N/A	N/A	\$ 950,200	-	-
Trucking Security Program	N/A	N/A	N/A	\$ 7,772	N/A	N/A	N/A	N/A	N/A	\$ 7,772	-	-
Tribal Homeland Security Grant Program	\$ 1,645	N/A	N/A	\$ 1,660	N/A	N/A	\$ 10,000	N/A	N/A	\$ 13,305	-	-
<i>Subtotal</i>	\$ 3,010,414	\$ 529,435	\$ 389,934	\$ 3,103,353	\$ 513,074	\$ 410,245	\$ 3,222,360	\$ 455,542	\$ 389,023	\$ 9,336,126	\$ 1,498,052	\$ 1,189,202
<i>Department of Interior</i>												
Rural Fire Assistance Outreach	N/A	N/A	N/A	N/A	N/A	N/A	\$ 7,000	N/A	N/A	\$ 7,000	-	-
<i>Subtotal</i>	-	-	-	-	-	-	\$ 7,000	-	-	\$ 7,000	-	-

Program	Thousands of Dollars (\$000)											
	FY 2008			FY 2009			FY 2010			TOTAL		
	Funding	Total EC Funding	Equipment	Funding	Total EC Funding	Equipment	Funding	Total EC Funding	Equipment	Funding	Total EC Funding	Equipment
<i>Department of Justice</i>												
Coordinated Tribal Assistance Solicitation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Community Oriented Policing Services Technology Grant Program	\$ 195,217	N/A	N/A	\$ 176,325	N/A	N/A	\$ 170,223	N/A	N/A	\$ 541,765	-	-
Edward Byrne Memorial Justice Assistance Grant Program	-	N/A	N/A	\$ 135,642	N/A	N/A	-	N/A	N/A	\$ 135,642	-	-
Research Grants (Law Enforcement, Geospatial, Criminal Justice IT)	N/A	N/A	N/A	N/A	N/A	N/A	-	N/A	N/A	-	-	-
<i>Subtotal</i>	\$ 195,217	-	-	\$ 311,967	-	-	\$ 170,223	-	-	\$ 677,407	-	-
<i>Department of Transportation</i>												
E911 Grant Program	-	-	-	\$ 43,500	\$ 41,515	\$ 31,765	-	-	-	\$ 43,500	\$ 41,515	\$ 31,765
<i>Subtotal</i>	-	-	-	\$ 43,500	\$ 41,515	\$ 31,765	-	-	-	\$ 43,500	\$ 41,515	\$ 31,765
TOTAL	\$ 6,449,505	\$ 1,497,820	\$ 1,261,481	\$ 4,842,819	\$ 554,589	\$ 442,010	\$ 13,523,536	\$ 455,542	\$ 389,023	\$ 24,815,859	\$ 2,507,952	\$ 2,092,514

APPENDIX D—NATIONAL PLAN ALIGNMENT DATA

Program	National Emergency Communications Plan (NECP) Goals and Objectives						
	Formal Governance Structures and Clear Leadership Roles	Coordinated Federal Activities	Common Planning and Operational Protocols	Standards and Emerging Communication Technologies	Emergency Responder Skills and Capabilities	System Life-Cycle Planning	Disaster Communications Capabilities
<i>Department of Agriculture</i>							
Rural Development Community Connect Broadband Grants	N	N	N	N	N	N	N
Rural Development Community Facilities Programs	N	N	N	N	N	N	N
Weather Radio Transmitter Grant Program	N	N	N	N	N	Y	Y
Traditional Infrastructure Loans	N	N	N	Y	N	N	N
Farm Bill Broadband Loans	N	N	N	Y	N	N	N
Broadband Telecom Loans - ARRA	N	N	N	Y	N	N	N
Broadband Telecom Grants - ARRA	N	N	N	Y	N	N	N
Distance Learning Telecom Loans	N	N	N	Y	N	N	N
Distance Learning Telecom Grants	N	N	N	Y	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>6</i>	<i>0</i>	<i>1</i>	<i>1</i>
<i>Department of Commerce</i>							
Broadband Technology Opportunities Program	N	N	N	Y	N	N	Y
Public Safety Interoperable Communications Grant Program	Y	Y	Y	Y	Y	Y	Y
Measurement Science and Engineering Research Grants Programs: Electronics and Electrical Engineering Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Information Technology Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Physics Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Subtotal</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>2</i>
<i>Department of Defense</i>							
Communications and Networking Discovery and Invention	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Department of Education</i>							
Readiness and Emergency Management for Schools	Y	Y	Y	Y	Y	Y	Y
<i>Subtotal</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
<i>Department of Health and Human Services</i>							
Hospital Preparedness Program	N	Y	Y	Y	Y	N	N
Public Health Emergency Response Grant Program	N	Y	Y	Y	Y	N	N
State Health Information Exchange Cooperative Agreement Program	Y	N	Y	N	N	N	N
<i>Subtotal</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>2</i>	<i>0</i>	<i>0</i>

Program	National Emergency Communications Plan (NECP) Goals and Objectives						
	Formal Governance Structures and Clear Leadership Roles	Coordinated Federal Activities	Common Planning and Operational Protocols	Standards and Emerging Communication Technologies	Emergency Responder Skills and Capabilities	System Life-Cycle Planning	Disaster Communications Capabilities
<i>Department of Homeland Security</i>							
Assistance to Firefighter Grants	N	Y	Y	Y	N	N	Y
Border Interoperability Demonstration Project	Y	Y	Y	Y	Y	Y	Y
Buffer Zone Protection Program	N	Y	Y	Y	N	Y	N
Emergency Management Performance Grant	Y	Y	Y	Y	Y	Y	Y
Emergency Operations Center Grant Program	N	N	Y	Y	N	N	N
Driver's License Security Grant Program	Y	N	Y	Y	N	Y	N
State Homeland Security Program	Y	Y	Y	Y	Y	Y	Y
Urban Area Security Initiative	Y	Y	Y	Y	Y	Y	Y
Operation Stonegarden	Y	Y	Y	Y	Y	Y	Y
Metropolitan Medical Response System Program	Y	Y	N	Y	Y	Y	N
Citizen Corps Program	Y	Y	N	Y	Y	Y	N
Freight Rail Security Grant Program	N	Y	N	Y	Y	N	Y
Intercity Bus Security Grant Program	Y	Y	N	N	Y	N	N
Intercity Passenger Rail (Amtrak)	Y	Y	Y	Y	Y	N	N
Interoperable Emergency Communications Grant Program	Y	Y	Y	Y	Y	Y	Y
Mississippi Interoperable Communications Grant	Y	Y	Y	Y	Y	Y	Y
Nonprofit Security Grant Program	Y	Y	Y	Y	N	N	N
Port Security Grant Program	Y	Y	Y	Y	Y	Y	N
Small Business Innovation Research Program	N	N	N	N	N	N	N
Transit Security Grant Program	N	Y	Y	Y	Y	N	Y
Trucking Security Program	N	Y	Y	Y	Y	Y	Y
Tribal Homeland Security Grant Program	Y	Y	Y	Y	Y	N	N
<i>Subtotal</i>	<i>15</i>	<i>19</i>	<i>17</i>	<i>20</i>	<i>16</i>	<i>13</i>	<i>11</i>
<i>Department of Interior</i>							
Rural Fire Assistance Outreach	Y	Y	Y	Y	Y	Y	Y
<i>Subtotal</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>

Program	National Emergency Communications Plan (NECP) Goals and Objectives						
	Formal Governance Structures and Clear Leadership Roles	Coordinated Federal Activities	Common Planning and Operational Protocols	Standards and Emerging Communication Technologies	Emergency Responder Skills and Capabilities	System Life-Cycle Planning	Disaster Communications Capabilities
<i>Department of Justice</i>							
Coordinated Tribal Assistance Solicitation	N	Y	Y	Y	Y	Y	N
Community Oriented Policing Services Technology Grant Program	N	N	N	Y	Y	N	N
Edward Byrne Memorial Justice Assistance Grant Program	N	N	Y	Y	N	N	N
Research Grants (Law Enforcement, Geospatial, Criminal Justice IT)	N	N	N	N	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>1</i>	<i>0</i>
<i>Department of Transportation</i>							
E911 Grant Program	Y	Y	Y	N	N	Y	Y
<i>Subtotal</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>1</i>
Total Programs Aligned	20	26	26	35	23	19	17
% Aligned	42%	54%	54%	73%	48%	40%	35%

Program	National Infrastructure Protection Plan (NIPP) Goals and Objectives	
	Coordinated critical infrastructure (CI) risk management plans and programs are in place to address known and potential threats and hazards	Access to robust information-sharing networks that include relevant intelligence and threat analysis, and real-time incident reporting
<i>Department of Agriculture</i>		
Rural Development Community Connect Broadband Grants	Y	N
Rural Development Community Facilities Programs	N	N
Weather Radio Transmitter Grant Program	N	N
Traditional Infrastructure Loans	N	Y
Farm Bill Broadband Loans	N	Y
Broadband Telecom Loans - ARRA	N	Y
Broadband Telecom Grants - ARRA	N	Y
Distance Learning Telecom Loans	N	Y
Distance Learning Telecom Grants	N	Y
<i>Subtotal</i>	1	6
<i>Department of Commerce</i>		
Broadband Technology Opportunities Program	N	Y
Public Safety Interoperable Communications Grant Program	Y	Y
Measurement Science and Engineering Research Grants Programs: Electronics and Electrical Engineering Laboratory Grants Program	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Information Technology Laboratory Grants Program	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Physics Laboratory Grants Program	N/A	N/A
<i>Subtotal</i>	1	2
<i>Department of Defense</i>		
Communications and Networking Discovery and Invention	N/A	N/A
Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology	N/A	N/A
<i>Subtotal</i>	0	0
<i>Department of Education</i>		
Readiness and Emergency Management for Schools	Y	N
<i>Subtotal</i>	1	0
<i>Department of Health and Human Services</i>		
Hospital Preparedness Program	N	N
Public Health Emergency Response Grant Program	N	N
State Health Information Exchange Cooperative Agreement Program	Y	N
<i>Subtotal</i>	1	0

Program	National Infrastructure Protection Plan (NIPP) Goals and Objectives	
	Coordinated critical infrastructure (CI) risk management plans and programs are in place to address known and potential threats and hazards	Access to robust information-sharing networks that include relevant intelligence and threat analysis, and real-time incident reporting
<i>Department of Homeland Security</i>		
Assistance to Firefighter Grants	Y	N
Border Interoperability Demonstration Project	Y	N
Buffer Zone Protection Program	Y	N
Emergency Management Performance Grant	Y	Y
Emergency Operations Center Grant Program	N	Y
Driver's License Security Grant Program	N	N
State Homeland Security Program	Y	Y
Urban Area Security Initiative	Y	Y
Operation Stonegarden	Y	Y
Metropolitan Medical Response System Program	Y	N
Citizen Corps Program	Y	N
Freight Rail Security Grant Program	Y	N
Intercity Bus Security Grant Program	N	N
Intercity Passenger Rail (Amtrak)	N	N
Interoperable Emergency Communications Grant Program	N	N
Mississippi Interoperable Communications Grant	N	N
Nonprofit Security Grant Program	Y	N
Port Security Grant Program	N	N
Small Business Innovation Research Program	N	N
Transit Security Grant Program	Y	N
Trucking Security Program	Y	N
Tribal Homeland Security Grant Program	Y	N
<i>Subtotal</i>	<i>14</i>	<i>5</i>
<i>Department of Interior</i>		
Rural Fire Assistance Outreach	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>

Program	National Infrastructure Protection Plan (NIPP) Goals and Objectives	
	Coordinated critical infrastructure (CI) risk management plans and programs are in place to address known and potential threats and hazards	Access to robust information-sharing networks that include relevant intelligence and threat analysis, and real-time incident reporting
<i>Department of Justice</i>		
Coordinated Tribal Assistance Solicitation	N	N
Community Oriented Policing Services Technology Grant Program	N	N
Edward Byrne Memorial Justice Assistance Grant Program	N	N
Research Grants (Law Enforcement, Geospatial, Criminal Justice IT)	N	N
<i>Subtotal</i>	0	0
<i>Department of Transportation</i>		
E911 Grant Program	Y	Y
<i>Subtotal</i>	1	1
Total Programs Aligned	19	14
% Aligned	40%	29%

Program	National E-911 Plan Goals and Objectives					
	Increase Public Access	Increase PSAP Capability	Improve PSAP Connectivity and Interoperability	Achieve Standards and Technology	Implement IP-enabled emergency networks	Identify solutions for providing E-911 access to those with disabilities
<i>Department of Agriculture</i>						
Rural Development Community Connect Broadband Grants	N	N	N	N	N	N
Rural Development Community Facilities Programs	N	N	N	N	N	N
Weather Radio Transmitter Grant Program	N	N	N	N	N	N
Traditional Infrastructure Loans	Y	N	N	N	Y	Y
Farm Bill Broadband Loans	Y	N	N	N	Y	Y
Broadband Telecom Loans - ARRA	Y	N	N	N	Y	Y
Broadband Telecom Grants - ARRA	Y	N	N	N	Y	Y
Distance Learning Telecom Loans	Y	N	N	N	Y	Y
Distance Learning Telecom Grants	Y	N	N	N	Y	Y
<i>Subtotal</i>	<i>6</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>6</i>	<i>6</i>
<i>Department of Commerce</i>						
Broadband Technology Opportunities Program	Y	Y	Y	N	Y	Y
Public Safety Interoperable Communications Grant Program	Y	Y	N	N	Y	N
Measurement Science and Engineering Research Grants Programs: Electronics and Electrical Engineering Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Information Technology Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Physics Laboratory Grants Program	N/A	N/A	N/A	N/A	N/A	N/A
<i>Subtotal</i>	<i>2</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>1</i>
<i>Department of Defense</i>						
Communications and Networking Discovery and Invention	N/A	N/A	N/A	N/A	N/A	N/A
Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology	N/A	N/A	N/A	N/A	N/A	N/A
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Program	National E-911 Plan Goals and Objectives					
	Increase Public Access	Increase PSAP Capability	Improve PSAP Connectivity and Interoperability	Achieve Standards and Technology	Implement IP-enabled emergency networks	Identify solutions for providing E-911 access to those with disabilities
<i>Department of Education</i>						
Readiness and Emergency Management for Schools	N	N	N	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Department of Health and Human Services</i>						
Hospital Preparedness Program	N	Y	N	N	N	N
Public Health Emergency Response Grant Program	N	Y	N	N	N	N
State Health Information Exchange Cooperative Agreement Program	N	N	N	N	N	Y
<i>Subtotal</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>
<i>Department of Homeland Security</i>						
Assistance to Firefighter Grants	N	N	N	N	Y	N
Border Interoperability Demonstration Project	Y	Y	Y	N	Y	N
Buffer Zone Protection Program	N	N	N	N	N	N
Emergency Management Performance Grant	Y	Y	N	N	Y	Y
Emergency Operations Center Grant Program	Y	Y	N	N	N	Y
Driver's License Security Grant Program	N	N	N	N	N	N
State Homeland Security Program	Y	Y	N	Y	N	Y
Urban Area Security Initiative	N	Y	N	Y	N	Y
Operation Stonegarden	N	Y	Y	N	N	Y
Metropolitan Medical Response System Program	N	N	N	N	N	N
Citizen Corps Program	N	Y	N	Y	N	N
Freight Rail Security Grant Program	N	N	N	N	Y	N
Intercity Bus Security Grant Program	N	N	N	N	N	N
Intercity Passenger Rail (Amtrak)	N	N	N	N	N	N
Interoperable Emergency Communications Grant Program	N	Y	N	N	Y	N
Mississippi Interoperable Communications Grant	N	Y	N	N	Y	N
Nonprofit Security Grant Program	N	N	N	N	N	N
Port Security Grant Program	N	N	N	N	N	N
Small Business Innovation Research Program	N	N	N	N	N	N
Transit Security Grant Program	N	N	N	N	N	N
Trucking Security Program	N	N	N	N	N	N
Tribal Homeland Security Grant Program	N	N	N	N	N	N
<i>Subtotal</i>	<i>4</i>	<i>9</i>	<i>2</i>	<i>3</i>	<i>6</i>	<i>5</i>

Program	National E-911 Plan Goals and Objectives					
	Increase Public Access	Increase PSAP Capability	Improve PSAP Connectivity and Interoperability	Achieve Standards and Technology	Implement IP-enabled emergency networks	Identify solutions for providing E-911 access to those with disabilities
<i>Department of Interior</i>						
Rural Fire Assistance Outreach	N	N	N	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Department of Justice</i>						
Coordinated Tribal Assistance Solicitation	N	N	N	N	N	N
Community Oriented Policing Services Technology Grant Program	N	N	N	N	N	N
Edward Byrne Memorial Justice Assistance Grant Program	N	N	N	N	N	N
Research Grants (Law Enforcement, Geospatial, Criminal Justice IT)	N	N	N	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Department of Transportation</i>						
E911 Grant Program	Y	Y	Y	Y	Y	Y
<i>Subtotal</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>
Total Programs Aligned	13	14	4	4	15	14
% Aligned	27%	29%	8%	8%	31%	29%

Program	National Broadband Plan Goals and Objectives		
	Promote public safety wireless broadband communications	Promote cybersecurity and the protection of critical broadband infrastructure	Encourage innovation in the development and deployment of NG 911 networks and emergency alert systems
<i>Department of Agriculture</i>			
Rural Development Community Connect Broadband Grants	N	N	N
Rural Development Community Facilities Programs	N	N	N
Weather Radio Transmitter Grant Program	N	N	N
Traditional Infrastructure Loans	Y	Y	N
Farm Bill Broadband Loans	Y	Y	N
Broadband Telecom Loans - ARRA	Y	Y	N
Broadband Telecom Grants - ARRA	Y	Y	N
Distance Learning Telecom Loans	Y	Y	N
Distance Learning Telecom Grants	Y	Y	N
<i>Subtotal</i>	<i>6</i>	<i>6</i>	<i>0</i>
<i>Department of Commerce</i>			
Broadband Technology Opportunities Program	Y	Y	Y
Public Safety Interoperable Communications Grant Program	Y	N	Y
Measurement Science and Engineering Research Grants Programs: Electronics and Electrical Engineering Laboratory Grants Program	N/A	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Information Technology Laboratory Grants Program	N/A	N/A	N/A
Measurement Science and Engineering Research Grants Programs: Physics Laboratory Grants Program	N/A	N/A	N/A
<i>Subtotal</i>	<i>2</i>	<i>1</i>	<i>2</i>
<i>Department of Defense</i>			
Communications and Networking Discovery and Invention	N/A	N/A	N/A
Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology	N/A	N/A	N/A
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Department of Education</i>			
Readiness and Emergency Management for Schools	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>

Program	National Broadband Plan Goals and Objectives		
	Promote public safety wireless broadband communications	Promote cybersecurity and the protection of critical broadband infrastructure	Encourage innovation in the development and deployment of NG 911 networks and emergency alert systems
<i>Department of Health and Human Services</i>			
Hospital Preparedness Program	N	N	N
Public Health Emergency Response Grant Program	N	N	N
State Health Information Exchange Cooperative Agreement Program	N	Y	N
<i>Subtotal</i>	<i>0</i>	<i>1</i>	<i>0</i>
<i>Department of Homeland Security</i>			
Assistance to Firefighter Grants	Y	N	Y
Border Interoperability Demonstration Project	Y	N	Y
Buffer Zone Protection Program	N	N	N
Emergency Management Performance Grant	Y	Y	Y
Emergency Operations Center Grant Program	N	Y	N
Driver's License Security Grant Program	N	N	N
State Homeland Security Program	N	Y	N
Urban Area Security Initiative	N	Y	N
Operation Stonegarden	N	Y	N
Metropolitan Medical Response System Program	N	N	N
Citizen Corps Program	N	N	N
Freight Rail Security Grant Program	Y	N	Y
Intercity Bus Security Grant Program	N	N	N
Intercity Passenger Rail (Amtrak)	N	N	N
Interoperable Emergency Communications Grant Program	Y	N	Y
Mississippi Interoperable Communications Grant	Y	N	Y
Nonprofit Security Grant Program	N	N	N
Port Security Grant Program	N	N	N
Small Business Innovation Research Program	N	N	N
Transit Security Grant Program	N	N	N
Trucking Security Program	N	N	N
Tribal Homeland Security Grant Program	N	N	N
<i>Subtotal</i>	<i>6</i>	<i>5</i>	<i>6</i>
<i>Department of Interior</i>			
Rural Fire Assistance Outreach	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>

Program	National Broadband Plan Goals and Objectives		
	Promote public safety wireless broadband communications	Promote cybersecurity and the protection of critical broadband infrastructure	Encourage innovation in the development and deployment of NG 911 networks and emergency alert systems
<i>Department of Justice</i>			
Coordinated Tribal Assistance Solicitation	N	N	N
Community Oriented Policing Services Technology Grant Program	N	N	N
Edward Byrne Memorial Justice Assistance Grant Program	N	N	N
Research Grants (Law Enforcement, Geospatial, Criminal Justice IT)	N	N	N
<i>Subtotal</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>Department of Transportation</i>			
E911 Grant Program	Y	Y	Y
<i>Subtotal</i>	<i>1</i>	<i>1</i>	<i>1</i>
Total Programs Aligned	15	14	9
% Aligned	31%	29%	19%

APPENDIX E—ACRONYMS

Acronym	Definition
AAR	After Action Report
AEL	Authorized Equipment List
ARRA	American Recovery and Reinvestment Act
APCO	Association of Public Safety Communications Official
BIDP	Border Interoperability Demonstration Project
BIP	Broadband Initiatives Program
BSI	Bridging Systems Interface
BTOP	Broadband Technology Opportunities Program
BZPP	Buffer Zone Protection Program
CBRNE	Chemical, Biological, Radiological, Nuclear and Explosive
CCP	Citizen Corps Program
CI/KR	Critical Infrastructure and Key Resources
COML	Communications Unit Leader
COMT	Communications Technician
CSRIC	Communications Security, Reliability and Interoperability Council
CSSI	Console Subsystem Interface
DHS	Department of Homeland Security
DOJ	Department of Justice
DOT	Department of Transportation
ECPC	Emergency Communications Preparedness Center
ESF	Emergency Support Functions
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FSI	Fixed Station Interface
GETS	Government Emergency Telecommunications Services
GFG	Grant Focus Group
GPD	Grant Programs Directorate
HSGP	Homeland Security Grant Program
HSIN	Homeland Security Information Network
HSEEP	Homeland Security Exercise and Evaluation Program
HSPD	Homeland Security Presidential Directive
IAB	Inter-Agency Board
ICO	Implementation Coordination Office
ICS	Incident Command System
IMSI	Incident Management Systems Integration
IP	Internet Protocol
ISSI	Inter-Radio Frequency Subsystem Interface
ITS	Institute for Telecommunication Sciences
JAG	Justice Assistance Grant
LMR	Land Mobile Radio
LTE	Long Term Evolution
MMRS	Metropolitan Medical Response System
NASTD	National Association of State Telecommunications Director
NCS	National Communications Services
NECP	National Emergency Communications Plan
NET	New and Emerging Technologies
NG911	Next Generation 911
NGN	Next Generation Network
NGO	Non-governmental Organization
NHTSA	National Highway Traffic Safety Administration
NIC	National Integration Center
NIEM	National Information Exchange Model
NIMS	National Incident Management System
NIMSCAST	NIMS Compliance Assistance Support Tool
NIPP	National Infrastructure Protection Plan
NIST	National Institute of Standards and Technology
NRF	National Response Framework
NS/EP	National Security and Emergency Preparedness

Acronym	Definition
OASIS	Organization for the Advancement of Structured Information Standards
OEC	Office of Emergency Communications
OIC	Office for Interoperability and Compatibility
OMB	Office of Management and Budget
OPSG	Operation Stonegarden
P25	Project 25
PSAP	Public Safety Answering Point
PSCR	Public Safety Communications Research
PSIC	Public Safety Interoperable Communications
RKB	Responder Knowledge Base
SAA	State Administrative Agency
SCIP	Statewide Communication Interoperability Plan
SDO	Standards Development Organizations
SEL	Standardized Equipment List
SHSP	State Homeland Security Program
SIGB	Statewide Interoperability Governing Body
SOP	Standard Operating Procedures
SSP	Sector-Specific Plan
SWIC	Statewide Interoperability Coordinator
TA	Transition Administrator
TIA	Telecommunications Industry Association
TICP	Tactical Interoperable Communications Plan
TSGP	Transit Security Grant Program
TSP	Telecommunications Service Priority
UASI	Urban Area Security Initiative
VoIP	Voice over Internet Protocol
WMD	Weapons of Mass Destruction
WPS	Wireless Priority Service