

National Emergency Communications Plan Status Report: Goal Evaluation and Federal Coordination

September 1, 2016 Fiscal Year 2016 Report to Congress



Message from the Under Secretary

September 1, 2016

I am pleased to submit the following "National Emergency Communications Plan Status Report: Goal Evaluation and Federal Coordination," prepared by the National Protection and Programs Directorate (NPPD).

This document has been compiled pursuant to language in Senate Report 114-68, which accompanies the *Fiscal Year 2016 Department of Homeland Security* (DHS) *Appropriations Act* (P.L. 114-113). It fulfills the Department's requirement to provide a report that outlines the measures that will be used to evaluate fulfillment of the goals and describes how DHS and NPPD's Office of Emergency Communications (OEC) work with federal agencies to ensure that current and future programs work together to meet the needs of national emergency communications.



Pursuant to congressional requirements, this report is being provided to the following Members of Congress:

The Honorable John R. Carter Chairman, House Appropriations Subcommittee on Homeland Security

The Honorable Lucille Roybal-Allard Ranking Member, House Appropriations Subcommittee on Homeland Security

The Honorable John Hoeven Chairman, Senate Appropriations Subcommittee on Homeland Security

The Honorable Jeanne Shaheen Ranking Member, Senate Appropriations Subcommittee on Homeland Security

Inquiries relating to this report may be directed to me at (202) 646-3900 or to the Department's Deputy Under Secretary for Management and Chief Financial Officer, Chip Fulghum, at (202) 447-5751.

Sincerely,

Suzanne E. Spaulding

Augene E. Lace

Under Secretary

National Protection and Programs Directorate

Executive Summary

This document has been compiled pursuant to Senate Report 114-68, which accompanies the *FY 2016 DHS Appropriations Act* (P.L. 114-113). It fulfills the Department's requirement to provide a report that outlines the measures that will be used to evaluate fulfillment of the 2014 National Emergency Communications Plan goals and describes how DHS and OEC work with federal agencies to ensure that current and future programs work together to meet the needs of national emergency communications.



National Emergency Communications Plan Status Report: Goal Evaluation and Federal Coordination

Table of Contents

I.	Legislative Language	1
II.	Background	2
III.	Analyze and Develop	4
IV.	Implement and Measure	5
	Demonstration of emergency communications operational performance	
	Assessment of emergency communications capabilities	
	Completion of National Emergency Communications Plan recommendations and implementation actions	
V.	Coordination with Federal Partners	8
App	pendices	10
	Appendix A. Select Emergency Communications Accomplishments	
	during 2014 – Present	10
	Appendix B. Progress Made after 2008 NECP	12

I. Legislative Language

This report responds to the requirements set forth in Senate Report 114-68, which accompanies the *Fiscal Year* (FY) *2016 Department of Homeland Security* (DHS) *Appropriations Act* (P.L. 114-113).

Senate Report 114-68 states:

The Committee notes the publication of the second National Emergency Communications Plan in November 2014. The Plan highlights that the goals of reaching interoperability in specific geographical areas, as set forth in the first Plan (published in 2008), have been completed. Further, the update explains the communications operating environment has changed with new technologies, modernization, and demands from public safety and citizens. Several recommendations and objectives are included in the Plan which is broad-reaching and more complex than the initial plan but it lacks specific timeframes and metrics to evaluate progress. OEC shall provide a report to the Committee no later than 120 days after the date of enactment of this act outlining the measures that will be used to evaluate fulfillment of the goals. Additionally, the report shall include a description of how DHS and OEC work with federal agencies to ensure current and future programs such as FEMA preparedness grants, FirstNet, and other programs work together to meet the needs of national emergency communications.

II. Background

This report describes how the National Protection and Programs Directorate's (NPPD) Office of Emergency Communications (OEC) is implementing the revised National Emergency Communications Plan (NECP) issued by DHS in November 2014. This report outlines the approach that will be used to evaluate achievement of the goals, objectives, and recommendations described in the NECP, and addresses how OEC is collaborating with its federal partners to ensure that current and future programs are coordinated to meet national emergency communications needs.

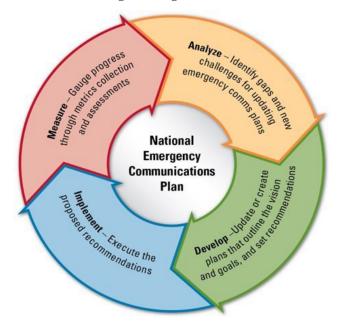
Two appendices provide greater detail on OEC accomplishments since its inception. Appendix A highlights select accomplishments that have been achieved since 2014, while Appendix B includes representative accomplishments achieved since the 2008 NECP.

The 2014 NECP builds upon the progress and lessons learned from implementing the 2008 NECP. The 2008 NECP established a baseline level of interoperability and measured communications capabilities throughout all 56 states and territories. Among the accomplishments from the first NECP, OEC helped federal, state, and local partners to establish new governance structures and leadership positions at the state and territorial levels to coordinate planning and decision-making for interoperability; supported local public safety agencies in the development of tactical plans and protocols to coordinate communications during emergencies; and provided training to responders and technicians to lead communications during incidents across the Nation.

Consistent with statutory requirements, the goals, objectives, and recommendations of the 2014 NECP provide a blueprint for enhancing emergency communications capabilities nationwide. Exhibit 1 depicts the repeatable process that DHS established for implementing and measuring the NECP in coordination with the Plan's stakeholders. The intent is to drive continuous improvement of the Nation's emergency communications capabilities through four primary phases:

 Analyze: Assess implementation of existing planning priorities in conjunction with lessons learned

Exhibit 1. National Emergency Communications Plan Strategic Management Process



- from real-world incidents, events, and exercises to identify areas for continued improvement.
- **Develop:** On the basis of the analysis, generate new strategic priorities (e.g., vision, goals, objectives, and recommendations) to target current gaps and address future needs.
- **Implement:** Design supporting activities and timeframes for achieving the recommendations and building capability.
- Measure: Regularly assess progress in meeting milestones and achieving goals.

III. Analyze and Develop

Since the release of the 2008 NECP, the emergency communications landscape has been transformed into a new, complex operating environment. Among the key developments are major changes in policy, law, budgetary conditions, and, most notably, communications technologies. Unprecedented technological evolutions within the communications industry brought tremendous opportunities for public safety organizations to deploy enhanced communications capabilities. It also brought the recognition that the pace of innovation often is moving faster than the ability of first responders and public safety officials to incorporate them into sound operational doctrine, policy, and procedure. To address these challenges, OEC collaborated with federal; state, local, tribal, and territorial (SLTT); and industry partners to revise the NECP. This updated plan establishes new goals and objectives to ensure that strategies, resource decisions, and investments for emergency communications keep pace with this evolving environment.

The 2014 NECP is grounded in the concept of an emergency communications ecosystem, which consists of many interrelated components and functions, including communications for incident response operations, notifications, alerts, and warnings; requests for assistance and reporting; and public information exchange. Historically, emergency communications capabilities were built almost exclusively with the use of land mobile radio (LMR) technologies; however, the ecosystem presumes that public safety organizations will leverage multiple platforms to achieve a reliable and interoperable communications capability. Additionally, the 2014 NECP assumes that more users will be active in the emergency communications ecosystem, including the general public. The expansion of communications technologies used by public safety; the number and type of users requiring an emergency communications capability; and heightened expectations of those users present a fundamentally different problem when it comes to assessing those capabilities than was the case in 2008. As required in 6 USC § 573(a), OEC currently is planning for a national level assessment of emergency communications capabilities across this landscape of users and technologies.

IV. Implement and Measure

OEC will utilize the knowledge and experience gained through the implementation and measurement following the release of the 2008 NECP to guide 2014 NECP efforts. After the 2008 release, DHS partnered with public safety agencies and emergency responders to assess the operational performance of emergency communications in Urban Area Security Initiative locales. OEC collaborated with 60 major urban areas cities to assess their ability to demonstrate response-level emergency communications during a planned event. In 2010–2011, OEC completed a nationwide effort to assess the operational performance and capability of local jurisdictions (i.e., counties or county-equivalents) to establish and maintain interoperable communications during planned events or real-world incidents. More than 2,800 counties reported their results to OEC.

This measurement process allowed jurisdictions to gain a baseline understanding of their emergency communications capabilities (e.g., the degree to which training and exercises are conducted within a county or county-equivalent). Capability measures were used in combination with operational performance measures to provide a more complete understanding of emergency communications. In general, jurisdictions with higher overall capability measurements can be expected to demonstrate greater operational effectiveness. The NECP will focus its assessment actions around the following three measures, displayed in Exhibit 2.

Exhibit 2. NECP Measures of Success Strategy Components Measures **Demonstration of** As capabilities operational are developed, Vision emergency the emergency communications response community Success progresses Development of Strategic Direction toward the Plan's emergency Goals envisioned communications end state capabilities mplementation Completion of The Plan's **Objectives** the Plan's recommendations recommendations and supporting actions aim to spur development of emergency **Implementation Actions** communications capabilities

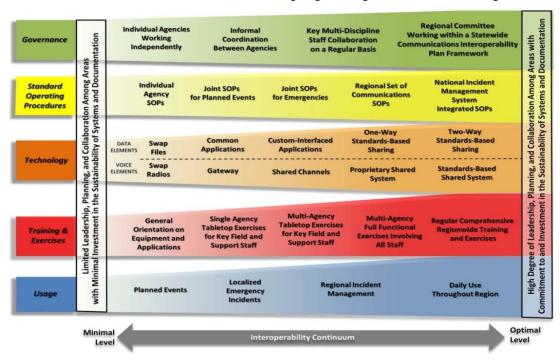
Demonstration of emergency communications' operational performance

To measure progress toward the 2014 NECP's vision, DHS will employ similar methods for testing operational performance used to measure interoperability under the 2008 NECP, while taking into account the changes that have taken place over the 6 years between plans. DHS will partner with jurisdictions across the country to test their ability to demonstrate response-level communications during an incident or event.

This effort is currently in the early planning stages. Over the next several years, OEC plans to revisit a number of urban areas that were visited during the 2008 NECP Goal 1 assessments. DHS deemed this a priority effort for FY 2016 following several mass casualty events across the country and internationally (e.g., Paris terrorist attacks – November 2015, San Bernardino shooting – December 2015). OEC plans to conduct a pilot project with select urban areas by the end of the fiscal year. This will allow OEC to make rolling improvements to reflect the current priorities and the evolving emergency communications ecosystem.

Assessment of emergency communications capabilities

DHS also will assess progress in building emergency communications capabilities consistent with the SAFECOM Interoperability Continuum (see Exhibit 3). To measure progress since the last assessment, OEC stood up a working group with the National Council of Statewide Interoperability Coordinators¹ (NCSWIC) and SAFECOM² representatives to develop a stakeholder-driven set of performance indicators to measure the levels of nationwide progress against each NECP goal. These



indicators will allow OEC to monitor progress toward meeting the goals consistently

¹ NCSWIC enhances public safety by assisting states and territories through the statewide interoperability coordinators with implementing the core elements of operable communications and ensuring interoperable communications.

² SAFECOM's mission is to improve designated emergency response providers' interjurisdictional and interdisciplinary emergency communications interoperability through collaboration with emergency responders across federal and SLTT governments, and international borders.

across the country, thereby giving OEC the ability to identify areas needing additional support to build capability. The working group identified six performance indicators and will test the feasibility of each measure in the coming months. Once the indicators prove effective, reliable, and repeatable for continued measurement, OEC will develop a plan for collection and assessment of the data.

Completion of National Emergency Communications Plan recommendations and implementation actions

DHS is partnering with NECP stakeholders to identify specific activities to support implementation of the NECP's recommendations. To facilitate the tracking of projects and programs, OEC created a comprehensive implementation plan and data dashboard that identifies 92 initiatives and associated actions. The action plan serves as an accountability resource for OEC to measure organizationwide progress and resource efficiency. The 2016 Biennial Report on Emergency Communications and the Emergency Communications Preparedness Center's (ECPC) annual strategic assessment will document how OEC, DHS, and its federal partners in the ECPC are advancing emergency communications across the Federal Government and in coordination with SLTT partners across the Nation. Appendix A highlights a selection of achievements.

V. Coordination with Federal Partners

In addition to the SLTT community, OEC has the responsibility to coordinate emergency communications activities within DHS, with federal departments and agencies, and internationally along U.S. borders. DHS continues to facilitate emergency communications coordination and progress on interoperability issues through the DHS Joint Wireless Program Management Office (JWPMO), the ECPC, and the National Security/Emergency Preparedness Executive Committee. JWPMO, OEC, and the Federal Emergency Management Agency (FEMA) Emergency Management Institute currently are collaborating on DHS training on LMR interoperability to help operations personnel better understand and utilize interoperability frequencies of the radio systems used by DHS.

The ECPC Research and Development (R&D) Focus Group outlined the R&D Baseline Report and R&D Collaboration Roadmap. In June 2014, the Focus Group completed its R&D Baseline Report, which provides a snapshot of federal emergency communications R&D projects, trends, and findings and offers conclusions to guide the path forward. In 2015, the Focus Group completed the R&D Collaboration Roadmap, which articulates the strategic plan for implementing the infrastructure, procedures, and cadence for ongoing collaboration on federal emergency communications R&D.

Additionally the ECPC coordinated with FirstNet, an independent authority within the U.S. Department of Commerce's National Telecommunications and Information Administration. Specifically, the ECPC established a FirstNet Consultation Group to coordinate federal activities, such as the collection of data related to the needs of federal users and federal assets that may be leveraged to deploy the National Public Safety Broadband Network. That group since has transitioned to FirstNet with ECPC participation in monthly calls.

OEC, in coordination with Department of Transportation (DOT), is working to identify risks and mitigation strategies to enhance emergency communications security, resilience, continuity, and operability resilience. This collaborative effort produced the Cyber Risks Primer for Next Generation 911 systems that satisfies requirements in 6 USC 571 (c)(6) and (d)(3).

In addition to these published efforts, coordination also takes place in less visible ways. OEC is working closely with FEMA's National Preparedness Assessment Division to use data collected from states' annual Threat and Hazard Identification and Risk Assessment and State Preparedness Report submissions to inform OEC programs. OEC also developed a memorandum of understanding with FEMA to coordinate on federal grant programs.

Grant programs that support NECP initiatives help to ensure that SLTT government agencies have the necessary resources to continue investing in emergency communications. Grant funding significantly eases the burden on SLTT governments to implement fully new objectives and actions required to address information interoperability, cybersecurity, and other concerns present in the evolving operating environment. Currently, the primary document that OEC uses to influence grant funding spent on emergency communications is the SAFECOM Guidance on Emergency Communications Grants.³ OEC and FEMA's Grant Programs Directorate established a memorandum of agreement in 2014 to strengthen working relationships and to implement U.S. Government Accountability Office recommendations that sought to clarify DHS grantee compliance on SAFECOM guidance and to ensure consistency across funding opportunities.

OEC also supports the ECPC Grants Focus Group and facilitates regular meetings. The FY 2016 ECPC Federal Financial Assistance Reference Guide for Federal Program Managers will be released soon. This document provides federal program managers with necessary guidance and best practices to ensure that federal grants funding emergency communications align with the common criteria established in the SAFECOM guidance.

Through the NECP and the work of OEC and its partners, DHS is committed to ensuring that the Nation's emergency responders can meet their mission needs and achieve the long-term vision of the Plan: "To enable the Nation's emergency response community to communicate and share information across levels of government, jurisdictions, disciplines, and organizations for all threats and hazards, as needed and when authorized."

9

³ https://www.dhs.gov/safecom/funding

Appendices

Appendix A. Select Emergency Communications Accomplishments during 2014 – Present

	2014 NECP Goals				
Accomplishment	Governance and Leadership	Goal 2: Planning and Procedures	Goal 3: Training and Exercises	Goal 4: Operational Coordination	Goal 5: Research and Development
The Office of Emergency Communications (OEC) partnered with the National Council of Statewide Interoperability Coordinators (NCSWIC) and SAFECOM to develop The Governance Guide for State, Local, Tribal, and Territorial Emergency Communications Officials ("Governance Guide"), a tool for public safety professionals at all levels of government and disciplines to use in assessing, establishing, and sustaining effective emergency communications governance.	X				
OEC released the 9-1-1 Governance and Planning Case Study , which examined the governance, planning, and funding challenges that states are facing regarding 9-1-1. The case study makes a number of recommendations for OEC to improve coordination between 9-1-1 entities and other federal and state, local, tribal, and territorial (SLTT) public safety organizations.	X				
OEC and the Department of Transportation (DOT) developed a memorandum of agreement to send OEC personnel to DOT to support the National 9-1-1 Program carried out by the National Highway Traffic Safety Administration, Office of Emergency Medical Services.		X			X
The SAFECOM and NCSWIC Joint Technology Policy Committee released a revised Public Safety Communications Evolution brochure; a Broadband 101 presentation; a land mobile radio fact sheet; and a Project 25 position paper; and began development of the T-Band Giveback: Implications for the Public Safety Community.		X			
As of the end of Fiscal Year 2015, OEC worked with 53 states and territories to update Statewide Communications Interoperable Plans to reflect the 2014 National Emergency Communications Plan to include new and emerging technologies and to define priorities in a tight fiscal climate.		X			
The Emergency Communications Preparedness Center research and development (R&D) Focus Group completed its R&D Baseline Report , which provides a snapshot of federal emergency communications R&D projects, trends, and the R&D Collaboration Roadmap , which articulates the strategic plan for implementing the infrastructure, procedures, and cadence for ongoing collaboration on federal emergency communications R&D.		X			X
The DHS Communications Interoperability Plan (DCIP) was released in September 2015. The DHS Joint Wireless Program Management Office currently is working on the DCIP Implementation Plan.		X			
OEC is developing a Priority Telecommunications Service-focused best practices guidance document for stakeholders, which will help to increase awareness and use of Government Emergency Telecommunications Services (GETS)/Wireless Priority Services (WPS)/Telecommunication Service Priority and the service subscription process for federal and SLTT stakeholders. OEC will incorporate awareness and use of GETS and WPS into three communications unit course curricula and include GETS/WPS in training scenarios for five communications-focused exercises.	X		X		

	2014 NECP Goals				
Accomplishment	Goal 1: Governance and Leadership	Goal 2: Planning and Procedures	Goal 3: Training and Exercises	Goal 4: Operational Coordination	Goal 5: Research and Development
In 2015, OEC led the creation of the Caribbean Federal Interoperability					
Working Group co-chaired by the United States Coast Guard San Juan and Homeland Security Investigations San Juan. This working group has involvement from roughly two dozen federal agencies working throughout the Caribbean. The purpose of the working group is to approach emergency communications and interoperability collectively and to leverage available assets in the Caribbean region to ensure safe and successful response and recovery operations.	X	X			
In September 2015, OEC assisted the U.S. Secret Service by developing interagency communications plans for Pope Francis's visit to New York and Pennsylvania.				X	
During the summer of 2015 Washington Wildfire Presidential Disaster Declaration, the State of Washington requested OEC support at the Emergency Support Function #2 desk at the Washington Emergency Operations Center and to the Federal Emergency Management Agency Region 10 Disaster Emergency Communications Coordinator.				X	

Appendix B. Progress Made after 2008 NECP

The 2008 National Emergency Communications Plan (NECP) focused primarily on incident response and coordination, which necessitated placing emphasis on traditional public safety entities and the use of land mobile radio. Given this context, the 2008 NECP is the source of many key achievements, achievements that will continue to support the current emergency communications landscape. Some of these achievements are covered in greater detail below.

Organizationally, the Department of Homeland Security (DHS) programs that administer emergency communications projects and programs are housed in a number of places across DHS and its Components. In Fiscal Year 2010, realizing the need for information sharing among these programs and the potential for synergies and efficiencies, the Secretary of DHS stood up the OneDHS Emergency Communications Committee. The committee was to be chaired by the Assistant Secretary for Cybersecurity and Communications under the National Protection and Programs Directorate, to be administered by the DHS Office of Emergency Communications (OEC), and to draw its membership from the various emergency communications programs that existed across the Department.

When it was established, the OneDHS Emergency Communications Committee provided the only forum of its kind to facilitate information sharing and improved awareness among the Department's many diverse emergency communications-related programs. This information sharing and awareness enabled the sharing of lessons learned and best practices, better informed planning and policy-making, more inclusive requirements gathering, unification of departmental positions on key issues, and the identification and execution of joint initiatives. OneDHS has evolved and the Joint Wireless Program Management Office now has responsibility for many of the former OneDHS functions.

OEC established the Regional Coordination Branch to manage OEC regional coordinators (RC). RCs promote operational effectiveness through the coordination of emergency communications capabilities, resources, and personnel from across the whole community. Residing in the regions allows OEC to work more closely with state, local, tribal, and territorial partners and gives OEC a better understanding of the capabilities, resources, and challenges experienced across the country. In addition to supporting preparedness efforts such as planning and providing training and exercise support, the RCs also are called upon to support real-world events.

OEC stood up the Emergency Communications Preparedness Center Research and Development (R&D) Focus Group to serve as a forum for federal departments and agencies to identify federal R&D gaps and coordination opportunities, share intellectual capital, and facilitate the planning and execution of joint emergency communications

R&D efforts. Members include more than 100 representatives from 14 federal departments. The R&D Focus Group mission is to:

- Establish and maintain heightened awareness of emergency communications R&D priorities, gaps, and activities across the Federal Government
- Reduce duplication of R&D efforts across the Federal Government
- Identify and execute opportunities to share information, resources, and capabilities to meet federal emergency communications R&D needs better
- Develop joint plans and elicit recommendations to address emergency communications R&D priorities and challenges

The United States-Canada border has and continues to pose unique communications challenges, including operable and interoperable communications gaps for radio and public safety communications along and across the border; legal and governance framework issues covering radio communications between U.S. and Canadian response personnel; and interoperability concerns for public safety broadband planning efforts. To address these challenges, OEC and Public Safety Canada formed the Canada-United States (CANUS) Communications Interoperability Working Group (CIWG) to improve interoperable crossborder emergency communications. In its role as a binational, federal-to-federal agency working group, the CANUS CIWG comprises U.S. and Canadian Federal Government officials and emergency communications, public safety, and security stakeholders who support crossborder emergency communications and improved response coordination to binational incidents.

As part of its technical assistance program to promote the NECP, OEC focuses on Statewide Communication Interoperable Plans (SCIP). These are state-developed and maintained plans that help states to establish or strengthen governance for interoperable emergency communications and to address gaps associated with states' public safety communications challenges. Since 2008, states/territories have completed SCIPs, with updates scheduled on a 24-month cycle. SCIPs are foundational to implementation of the NECP at the state/territory level. OEC encourages states to solicit participation from all levels of government and all public safety and public safety support functions in SCIP workshops. OEC offers technical assistance to assist states in meeting challenges to successful interoperable emergency communications through no-cost technical assistance.

Training is a major aspect of this technical assistance. Since November 2008, OEC has conducted numerous National Incident Management System (NIMS) Incident Command Structure-related courses:

Course	Classes
Communications Leader (COML)	155
Communications Technician (COMT)	108
Auxiliary Communications (AUXCOMM)	69
Incident Communications Manager (INCM)	2
Incident Tactical Dispatcher (INTD)	2
Radio Operator (RADO)	2
State-Sponsored Courses for COMT and AUXCOMM	35

State-sponsored courses represent an initiative begun in 2012 to promote the NECP further. In these courses, OEC trains qualified state/local public safety personnel to teach the same curriculum as offered through OEC's technical assistance program. Besides training on interoperable emergency communications techniques and employment within the NIMS Incident Command Structure, since the 2008 NECP, OEC has delivered other workshops to SLTT stakeholders that align with the SAFECOM Interoperability Continuum and help states to meet challenges and gaps that they identify:

Target Area	Workshops
Governance	73
Standard Operating Procedures and Communications Support	95
Communications Exercise and Operational Support	282
Broadband	95
Communications Systems Engineering Support	166
Tactical Communications Enhancement Support	111
Regional Communications Enhancement Support	5
Tribal Nations	18
Communications Assets Survey and Mapping NextGen	66
National Special Security Events	9