



July 2016

# EMERGENCY COMMUNICATIONS

## Effectiveness of the Post-Katrina Interagency Coordination Group Could Be Enhanced

# GAO Highlights

Highlights of [GAO-16-681](#), a report to congressional requesters

## Why GAO Did This Study

During emergency situations, reliable communications are critical to ensure a rapid and sufficient response. PKEMRA was enacted in 2006 to improve the federal government's preparation for and response to disasters, including emergency communications. Since that time, natural and man-made disasters continue to test the nation's emergency communications capabilities. Given that states and localities are the first line of response following a disaster, states' emergency communications planning is very important.

GAO was asked to review the implementation of PKEMRA. This report examines (1) federal efforts to implement PKEMRA emergency communications provisions related to planning and federal coordination, and (2) how states' emergency communications planning has changed since PKEMRA. GAO reviewed relevant reports and documentation from DHS and other agencies; surveyed SWICs from 50 states, the District of Columbia, and 5 territories, receiving 52 responses; assessed the ECPC's collaborative efforts; and interviewed federal and state officials selected for their emergency communications experience. GAO plans to review the implementation of other PKEMRA emergency communications provisions in future work.

## What GAO Recommends

GAO is making recommendations to DHS aimed at improving the ECPC's collaborative efforts, including defining its goals and tracking its recommendations. DHS concurred with the recommendations.

View [GAO-16-681](#). For more information, contact Mark Goldstein at (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov).

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# Effectiveness of the Post-Katrina Interagency Coordination Group Could Be Enhanced

## What GAO Found

Implementation of the Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA) provisions related to emergency communications planning and federal coordination has enhanced federal support for state and local efforts; however, federal coordination could be improved. PKEMRA created within the Department of Homeland Security (DHS) the Office of Emergency Communications, which has taken a number of steps aimed at ensuring that state and local agencies have the plans, resources, and training they need to support reliable emergency communications. PKEMRA also directed DHS to develop the National Emergency Communications Plan (NECP). The NECP includes goals for improving emergency communications and encourages states to align their plans with these emergency communications goals. PKEMRA further established the Emergency Communications Preparedness Center (ECPC), comprising 14 member agencies, to improve coordination and information sharing among federal emergency communications programs. GAO previously identified key features and issues to consider when implementing collaborative mechanisms, including interagency groups like the ECPC. GAO found that the ECPC's collaborative efforts were consistent with most of these features, such as those related to leadership and resources, but were not fully consistent with others. For example, one of the key features calls for interagency groups to clearly define goals and track progress, yet the ECPC has not done so. As a result, the ECPC's member agencies might not understand the ECPC's goals or have a chance to ensure that the goals align with their own agencies' purposes and goals. Furthermore, the ECPC puts forth recommendations that could improve emergency communications. But the recommendations are implemented at the discretion of the ECPC's member agencies and are not tracked. Without a mechanism to track the ECPC's recommendations, it is unclear the extent to which the recommendations are being implemented and the ECPC is missing an opportunity to monitor its progress.

Almost all of the Statewide Interoperability Coordinators (SWIC) responding to GAO's survey reported that to better plan for emergency communications during disasters, their states have taken the following steps since PKEMRA: (1) developed comprehensive strategic plans for emergency communications that align with the NECP; (2) established SWIC positions to support state emergency communications initiatives, such as developing high-level policy and coordinating training and exercises; and (3) implemented governance structures to manage the systems of people, organizations, and technologies that need to collaborate to effectively plan for emergencies. GAO did not independently verify state responses. In responding to GAO's survey, most SWICs reported not having a comprehensive emergency communications plans in place prior to PKEMRA's 2006 enactment. In particular, prior to the enactment of PKEMRA, only a few states had comprehensive emergency communications plans in place, but now all but one have such a plan. Most of the SWICs also reported that their statewide plans cover key elements, such as governance, standard operating procedures, and training and exercises, which are considered by DHS as the essential foundation for achieving the NECP goals.

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### Abbreviations

Commerce	Department of Commerce
DHS	Department of Homeland Security
E911	Enhanced 911
ECPC	Emergency Communications Preparedness Center
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FirstNet	First Responder Network Authority
NECP	National Emergency Communications Plan
NTIA	National Telecommunications and Information Administration
OEC	Office of Emergency Communications
OIC	Office of Interoperability and Compatibility
PKEMRA	Post-Katrina Emergency Management Reform Act of 2006
SCIP	Statewide Communications Interoperability Plan
SWIC	Statewide Interoperability Coordinator

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July 14, 2016

Congressional Requesters

For first responders in emergency situations, reliable communications are critical to ensuring a rapid and sufficient response. In the aftermath of Hurricane Katrina in 2005, gaps were apparent in how federal, state, and local entities responded to the catastrophic storm, including that emergency communications were not operable, interoperable, and continuous. In addition, many available communications assets were not fully utilized because of insufficient planning and coordination. Congress passed the Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA) to improve the federal government's preparation for and response to natural and manmade disasters.<sup>1</sup> Among the more than 300 PKEMRA reforms, 10 provisions specifically relate to improving emergency communications during disasters. Three of the emergency communications provisions focus on planning and federal coordination issues that were evident following Hurricane Katrina. These provisions (1) established the Office of Emergency Communications (OEC) within the Department of Homeland Security (DHS); (2) directed DHS to develop the National Emergency Communications Plan (NECP), a national strategy to enhance emergency communications response; and (3) establish the Emergency Communications Preparedness Center (ECPC), an interagency group responsible for coordinating federal emergency communications programs. In 2008, we reported on actions taken by DHS and others to implement the emergency communications provisions and found that not all of the provisions had been fully implemented at that time.<sup>2</sup> Since our prior report, all of PKEMRA's emergency communications provisions have been implemented, but natural disasters, such as Hurricane Sandy in 2012; terrorist attacks, such as the 2013 Boston Marathon bombings; and active shooter incidents continue

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<sup>1</sup>PKEMRA was enacted as Title VI of the Department of Homeland Security Appropriations Act, 2007, Pub. L. No. 109-295, 120 Stat. 1355 (2006). The PKEMRA provisions became effective upon enactment, October 4, 2006, with the exception of certain organizational changes related to the Federal Emergency Management Agency, most of which took effect on March 31, 2007.

<sup>2</sup>GAO, *Actions Taken to Implement the Post-Katrina Emergency Management Reform Act of 2006*, [GAO-09-59R](#) (Washington, D.C.: Nov. 21, 2008).

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to test the nation's emergency communications capabilities. These incidences can stretch across jurisdictional borders, further highlighting the need for operable, interoperable, and continuous emergency communications. Given that localities are the first line of response following a disaster, emergency communications planning at the state and local level is very important, and such planning facilitates coordination and decision making across all levels of government. DHS's *National Response Framework* stresses that planning is an inherent responsibility of every level of government.<sup>3</sup>

After Hurricane Sandy severely damaged local infrastructure, you asked us to evaluate how the implementation of PKEMRA's many provisions has affected disaster preparedness, response, and recovery in general. In this report, we focus on three emergency communications provisions related to planning and federal coordination. Specifically, we examined (1) federal efforts to implement PKEMRA's emergency communications provisions related to planning and federal coordination, and (2) how states' emergency communications planning has changed since PKEMRA and what challenges remain for the states. We plan to review PKEMRA's other emergency communications provisions related to disaster response and recovery in future work.

To address these objectives, we reviewed relevant reports, plans, and other documentation from DHS and other federal agencies with responsibilities related to emergency communications, such as the NECP and progress reports on its implementation, biennial reports to Congress on emergency communications, and Federal Communications Commission (FCC) reports on 911 and Enhanced 911 (E911) services.<sup>4</sup> We interviewed officials from DHS, FCC, and the Department of Commerce (Commerce) to determine their efforts to implement the PKEMRA emergency communications provisions. We reviewed documentation on the establishment of the ECPC, such as its charter and plans to understand its mission and purpose, as well as the *Annual Strategic Assessments* prepared for Congress to understand the steps

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<sup>3</sup>DHS, *National Response Framework, 2nd Edition* (Washington, D.C.: May 2013).

<sup>4</sup>E911 service refers to the capability of commercial carriers to automatically provide and public safety answering points to automatically receive an emergency caller's call-back and location information.

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and progress the ECPC has taken to improve federal coordination. We also interviewed 5 of 14 ECPC member agencies (DHS, FCC, Commerce, the Department of Transportation, and the General Services Administration) to understand their roles on the ECPC and how the ECPC has supported the coordination of federal emergency communications efforts. We selected agencies to interview with a range of emergency communications experience, and the views we obtained do not necessarily represent the views of all ECPC member agencies. We assessed the ECPC's collaborative efforts against six of seven key features and issues to consider when implementing collaborative mechanisms that we identified in a September 2012 report.<sup>5</sup> Additionally, to understand how states' emergency communications planning has changed since PKEMRA and what challenges remain for the states, we surveyed the Statewide Interoperability Coordinators (SWIC) in 50 states, the District of Columbia, and 5 territories.<sup>6</sup> We surveyed SWICs from February 2016 to April 2016 and received 52 responses for a 93 percent response rate.<sup>7</sup> More details about our scope and methodology can be found in appendix I and a copy of our survey results in appendix II.

We conducted this performance audit from July 2015 to July 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

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<sup>5</sup>GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012). In this report, we built on our prior work that identified key practices for Congress and others to consider when implementing collaborative mechanisms, see GAO, *Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies*, [GAO-06-15](#) (Washington, D.C.: Oct. 21, 2005). We did not assess the ECPC's efforts against one of the key features identified in [GAO-12-1022](#), bridging organizational cultures, because this would have included reviewing the organizational cultures of 14 participating agencies, which was outside our scope.

<sup>6</sup>According to DHS, SWICs are responsible for implementing a statewide strategic vision for emergency communications interoperability.

<sup>7</sup>One state (Massachusetts) and three territories (American Samoa, the Northern Mariana Islands, and Puerto Rico) did not respond to our survey. We did not verify states' responses.

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## Background

The Homeland Security Act of 2002 established DHS and required the agency, among other things, to build a comprehensive national incident management system comprising all levels of government and to consolidate existing federal government emergency response plans into a single, coordinated national response plan.<sup>8</sup> DHS developed the National Response Framework that identified core capabilities necessary to ensure national preparedness, such as operational planning at the federal and state level and emergency communications capabilities that enable emergency responders to effectively communicate with each other. States and localities provide the first response to any disaster and thus must plan and coordinate, across state lines, and with federal entities as well. States have developed plans and made efforts to coordinate in support of emergency communications. For example, state plans, called Statewide Communication Interoperability Plans, are intended to define the current and future direction for interoperable and emergency communications within the state.

In addition to DHS, other federal agencies play a role in supporting emergency communications during disasters. Specifically, FCC manages the use of spectrum by non-federal entities, including commercial enterprises and state and local governments, and administers policies related to 911 and E911 services. The Department of Commerce's National Telecommunications and Information Administration (NTIA) is responsible for managing spectrum used by the federal government and can temporarily assign spectrum during an emergency to aid the response.<sup>9</sup> Along with FCC, NTIA deploys personnel to support disasters in response to a mission assignment from DHS. Furthermore, the First Responder Network Authority (FirstNet), an independent authority within NTIA, is in the process of planning for the deployment of a high-speed,

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<sup>8</sup>Homeland Security Act of 2002, Pub. L. No. 107-296 § 502, 116 Stat. 2135, 2212 (2002), codified at 6 U.S.C. § 312.

<sup>9</sup>NTIA is the President's principal adviser on telecommunications and information policy issues, and in this role works with other executive branch agencies to develop and present the administration's position on these issues.

interoperable nationwide wireless broadband network for use by federal, state, tribal, and local public safety personnel.<sup>10</sup>

Congress passed PKEMRA in 2006 to address issues that arose during Hurricane Katrina, including emergency communications issues. PKEMRA contains 10 emergency communications provisions that, according to our 2008 report and updates we obtained from DHS, have all been implemented, as shown in table 1.<sup>11</sup> In this report, we focus on the first three emergency communications provisions listed in the table, requirements that are related to planning and federal coordination.

**Table 1: Post-Katrina Emergency Management Reform Act's (PKEMRA) Emergency Communications Requirements and Status, as of May 2016**

Emergency communications provision	Summary of requirement	Status
Office of Emergency Communications (OEC)	Create OEC and assign duties to the office.	Department of Homeland Security (DHS) created OEC in 2007 and assigned duties to the office.
National Emergency Communications Plan (NECP)	Develop a national strategy to enhance emergency communications response to ensure continuous communications during emergencies.	DHS issued the NECP in 2008 and 2014.
Emergency Communications Preparedness Center (ECPC)	Establish the ECPC to serve as the focal point for coordination of federal agencies' emergency communications efforts.	In 2009, 12 federal agencies came together to establish the ECPC. Today there are 14 federal agencies represented on the ECPC.
Regional Emergency Communications Coordination Working Group	Establish a Regional Emergency Communications Coordination Working Group in each of the Federal Emergency Management Agency's (FEMA) 10 regional offices.	DHS established the working groups in each of the FEMA regions.
Grant program guidance	Develop grant guidance to ensure federal guidelines for emergency communications grant programs are coordinated and consistent across all agencies that provide such funding.	DHS developed grant guidance in 2007 and has updated it annually.

<sup>10</sup>FirstNet was created to establish, for public safety use, a nationwide, interoperable, wireless broadband network. Pub. L. No. 112-96 title VI, subtitle B, §§ 6204-6213, 156 Stat. 206-218 (2012).

<sup>11</sup>[GAO-09-59R](#).

Emergency communications provision	Summary of requirement	Status
Technical assistance for urban and other high risk areas	Provide technical guidance, training, and other assistance to support the rapid establishment of interoperable emergency communications in urban and other areas deemed to be consistently at a high level of risk from disasters.	DHS has provided ongoing technical assistance to urban area grant recipients since 2007. DHS has also provided ongoing technical assistance to states and territories since 2007.
Office of Interoperability and Compatibility (OIC)	Identify the responsibilities of the Director of OIC in establishing standards, conducting research, and other duties.	OIC coordinated with relevant agencies on consensus standards, research and development, and other directives of this provision.
Interoperability research and development	Develop a comprehensive research and development program to support the continuity and interoperability of emergency communications during disasters.	DHS developed research and development programs since 2006 and continues to conduct research in these areas.
Assessments and reports	Complete a baseline assessment of federal and state emergency communications capabilities; provide a biennial progress report to Congress on emergency communications.	DHS submitted its baseline emergency communications assessment report in two phases completing both in 2008. DHS provides biennial progress reports to Congress on emergency communications and completed reports in 2008, 2011, and 2013. <sup>a</sup>
911 and Enhanced 911 (E911) services report <sup>b</sup>	Issue a report to Congress on the status of state, local, and tribal government efforts to develop plans for rerouting 911 and E911 services in the event that public safety answer points are disabled during disasters.	The Federal Communications Commission issued the report in September 2007.

Source: GAO summary of PKEMRA and DHS information. | GAO-16-681

<sup>a</sup>According to DHS, the biennial report was not issued in 2015 because DHS updated the NECP in 2014. DHS intends to issue the next biennial update in November 2016.

<sup>b</sup>E911 service refers to the capability of commercial carriers to automatically provide and public safety answering points to automatically receive an emergency caller's call-back and location information. Public safety answering points are call centers responsible for 911 and E911 calls.

While all of these PKEMRA provisions have been addressed, DHS continues to meet the requirements of some provisions, for example:

- *Grant program coordination:* DHS, in conjunction with other agencies, coordinates grant guidance across the government annually through

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SAFECOM's *Guidance on Emergency Communications Grants*.<sup>12</sup> The guidance provides grantees with directions on applying for funds to improve emergency communications and the current standards for grant award recipients. DHS developed the guidance to align with the first NECP and it now reflects the most recent NECP.

- *Interoperability research and development:* Since PKEMRA, DHS has conducted research and development to support emergency communications interoperability. Among other things, DHS is responsible for establishing research, development, testing, and evaluation programs for improving interoperable emergency communications.
- *Assessments and reports:* DHS intends to issue the next biennial progress report in November 2016.

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## Implementation of PKEMRA Provisions Has Enhanced Federal Support for State and Local Emergency Communications Efforts, but Federal Coordination Could Be Improved

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<sup>12</sup>Department of Homeland Security, Office of Emergency Communications, *Fiscal Year 2016 SAFECOM Guidance on Emergency Communications Grants* (2015). SAFECOM was formed in 2001 after the terrorist attacks of September 11, 2001, to improve public safety interoperability. SAFECOM's mission is to improve emergency response providers' emergency communications interoperability through collaboration with emergency responders across all levels of governments.

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## Enhanced Federal Support for State and Local Emergency Communications Efforts

### Office of Emergency Communications (OEC)

OEC has enhanced support of state and local planning and other emergency communications activities. OEC has taken a number of steps aimed at ensuring that federal, state, local, tribal, and territorial agencies have the plans, resources, and training they need to support interoperable emergency communications.<sup>13</sup> After being established in 2007, OEC focused on enhancing the interoperability and continuity of land mobile radio systems.<sup>14</sup> However, OEC's scope has expanded since then to include other technologies used to communicate and share information during emergencies, including devices that have advanced telecommunications capabilities, such as broadband access. OEC has developed policy and guidance supporting emergency communications across all levels of government and various types of technologies. Table 2 describes key guidance OEC has provided to state and local entities.

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<sup>13</sup>DHS defines interoperability as the ability of emergency response providers and relevant federal, state, and local government agencies to communicate with each other as necessary, through a dedicated public safety network utilizing information technology systems and radio communications systems, and to exchange voice, data, and video with one another on demand, in real time, as necessary.

<sup>14</sup>Land mobile radio systems are the primary means of communications among first responders. These systems typically consist of handheld portable radios, mobile radios, base stations, and repeaters.

**Table 2: Key Guidance Developed by the Office of Emergency Communications (OEC) for State and Local Entities**

Planning document	Purpose
Establishing Governance to Achieve Statewide Communications: A Guide for Statewide Communication Interoperability Plan Implementation	Supports states process to ensure emergency communications coordination at all levels of government. This support includes providing information about the role and operations of statewide governing bodies that are charged with improving communications interoperability across a state.
National Emergency Communications Capabilities Assessment Guide	Provides practical guidance for Statewide Interoperability Coordinators and others on assessing interoperable communications capabilities. Users may use the guide to identify challenges and successes and to build effective strategies for achieving and sustaining interoperability.
Emergency Communications System Lifecycle Planning Guide	Serves as a guide for state and local public-safety organizations to plan and budget for a public safety system’s implementation. This supports long-term system cost planning and budgeting and aligns with goals of the National Emergency Communications Plan.

Source: Department of Homeland Security | GAO-16-681

In addition to developing policy and guidance, OEC has provided technical assistance in the form of training, tools, and online and on-site assistance for federal, state, local, and tribal emergency responders. According to OEC, the technical assistance is designed to support interoperable emergency communications by helping states develop and implement their statewide plans to enhance emergency communications, standard operating procedures, and communications unit training, among other things. All states responding to our survey reported receiving technical assistance provided by OEC, and almost all of those states were satisfied with the support they received from OEC.<sup>15</sup> For example in response to our survey, one state commented that OEC had provided invaluable training for the state’s first responders and assistance to the state’s governing authority.

**National Emergency Communications Plan (NECP)**

According to DHS, the PKEMRA provision requiring the NECP has improved state and local emergency communications activities, including governance and planning. The NECP, first issued by DHS in 2008, served as the first national strategy aimed at improving emergency communications interoperability and provided a road map to improve emergency communications capabilities. For example, the 2008 NECP encouraged states to have standard operating procedures for specified events. To assist the states in this effort, OEC developed a toolkit that

<sup>15</sup>In response to our survey, two states reported being neither satisfied nor dissatisfied with the level of support for emergency communications planning from OEC.

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provides general guidance and tools for state communications planners in developing a plan for special events and made a variety of templates available online for states to use in developing standard operating procedures.

In 2014, DHS released its second NECP, which contains the following five goals:

- Governance and leadership: Enhance decision making, coordination, and planning for emergency communications through strong governance structures and leadership.
- Planning and procedures: Update plans and procedures to improve emergency responder communications and readiness in a dynamic-operating environment.
- Training and exercises: Improve responders' ability to coordinate and communicate through training and exercise programs that use all available technologies and target gaps in emergency communications.
- Operational coordination: Ensure operational effectiveness through the coordination of communications capabilities, resources, and personnel from across the whole community.
- Research and development: Coordinate research, development, testing, and evaluation activities to develop innovative emergency communications capabilities that support the needs of emergency responders.

DHS has taken various actions to support states' efforts to address these goals. For example, with respect to the first goal, DHS issued *The Governance Guide for State, Local, Tribal, and Territorial Emergency Communications Officials*.<sup>16</sup> This guide identified challenges related to emergency communications governance, as well as best practices and recommendations to overcome these challenges. In addition, OEC completed the *911 Governance and Planning Case Study*, which examined the governance, planning, and funding challenges that states are facing regarding 911 and made a number of recommendations for OEC to improve coordination. DHS has taken steps towards addressing

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<sup>16</sup>Department of Homeland Security, *Emergency Communications Governance Guide for State, Local, Tribal, and Territorial Officials* (Washington, D.C.: Sept. 2015).

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the other NECP goals. For example, related to the planning and procedures goal, DHS has coordinated with the Department of Transportation to identify risks and mitigation strategies to enhance the continuity and operability of emergency communications.<sup>17</sup> Among other things, DHS has also partnered with FirstNet to conduct an assessment of the potential cybersecurity challenges facing the public safety broadband network. According to DHS, it will provide information on additional progress on meeting the NECP goals in its biennial report to Congress scheduled to be completed in November 2016.

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### Although the ECPC Follows Most Key Features of Collaboration, It Could Enhance Its Effectiveness

The ECPC, the interagency collaborative group established by PKEMRA, provides a venue for coordinating federal emergency communications efforts. The ECPC works to improve coordination and information sharing among federal emergency communications programs. It does this by serving as the focal point for emergency communications issues across the federal agencies, supporting the coordination of federal programs, such as grant programs, and serving as a clearing house for emergency communications information, among other responsibilities. There are 14 member agencies of the ECPC that have staff on an Executive Committee responsible for setting the ECPC's priorities.<sup>18</sup> In addition, the ECPC has a Steering Committee and focus groups that develop plans to address the priorities. Currently, there are three focus groups examining issues related to grants, research and development, and 911 issues.<sup>19</sup> The focus groups report on their issues at Executive Committee and Steering Committee meetings and in the *Annual Strategic Assessment*.<sup>20</sup> DHS serves as the administrative leader of the ECPC, organizes the

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<sup>17</sup>According to DHS, the work done in conjunction with the Department of Transportation will result in three cyber threat and risk analysis reports.

<sup>18</sup>The ECPC includes the following departments: Departments of Treasury, Defense, Justice, the Interior, Agriculture, Commerce, Labor, Health and Human Services, Energy, Homeland Security, State, and Transportation; as well as two agencies: the Federal Communications Commission; and the General Services Administration.

<sup>19</sup>The ECPC previously had three other focus groups addressing broadband issues, support for FirstNet, and emergency communications capabilities mapping.

<sup>20</sup>DHS, *Emergency Communications Preparedness Center: Annual Strategic Assessment, Report to Congress for Calendar Year 2014* (Washington, D.C.: Nov. 10, 2015). As directed by PKEMRA, the ECPC is required to prepare an annual report to Congress that strategically assesses the coordination efforts of the ECPC members.

ECPC quarterly and other meetings, and drafts the *Annual Strategic Assessment* and other documents.

In a 2012 report, we examined interagency collaborative mechanisms, such as interagency groups, and identified certain key features and issues to consider when implementing these mechanisms.<sup>21</sup> We reported that following leading collaboration practices can enhance and sustain collaboration among federal agencies. For this report, we compared the ECPC's collaboration efforts with six of these key features and issues to consider, as shown in table 3.<sup>22</sup>

**Table 3: The Emergency Communications Preparedness Center's (ECPC) Collaboration Efforts Compared with Key Features and Issues to Consider when Implementing Collaborative Mechanisms**

Key collaboration features and issues to consider	ECPC's collaboration efforts
Outcomes and accountability <ul style="list-style-type: none"> <li>• Have short-term and long-term outcomes been clearly defined?</li> <li>• Is there a way to track and monitor progress?</li> </ul>	According to the Department of Homeland Security (DHS), the ECPC has long-term goals but these goals have not been documented in the ECPC charter, program plan, or <i>Annual Strategic Assessment</i> . Furthermore, the ECPC does not track or monitor its recommendations.
Leadership <ul style="list-style-type: none"> <li>• How will leadership be sustained over the long term?</li> </ul>	DHS is the administrative leader of the ECPC. DHS coordinates the meetings and drafts the <i>Annual Strategic Assessment</i> , while other agencies take lead roles in the ECPC's focus groups and lead interagency study efforts for ECPC topics with their areas of expertise.
Clarity of roles and responsibilities <ul style="list-style-type: none"> <li>• Have participating agencies clarified roles and responsibilities?</li> </ul>	According to the ECPC charter, the role of the ECPC Executive Committee members is to represent the priorities and interest of their respective agency. For example, the General Services Administration told us its primary role in the ECPC is to support those agencies that procure emergency communications devices. However, it is not well documented whether all member agencies have defined and agreed upon their respective roles and responsibilities.

<sup>21</sup> [GAO-12-1022](#).

<sup>22</sup> We did not assess the ECPC's efforts against one of the key features identified in [GAO-12-1022](#), bridging organizational cultures, because this would have included reviewing the organizational cultures of 14 participating agencies, which was outside our scope.

<p>Participants</p> <ul style="list-style-type: none"> <li>• Have all relevant participants been included?</li> <li>• Do they have the ability to commit resources for their agency?</li> </ul>	<p>According to the Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA), the Departments of Homeland Security, Defense, Commerce, Justice; the Federal Communications Commission; and other federal departments and agencies shall jointly operate the ECPC. The ECPC program plan notes that the ECPC Executive Committee may invite other federal departments and agencies to join or otherwise participate in the ECPC. The members required by PKEMRA—as well the Departments of Treasury, the Interior, Agriculture, Labor, Health and Human Services, Energy, State, and Transportation; and the General Services Administration—serve on the ECPC. Four of the five member agencies we contacted told us that they do not provide funding for the ECPC; rather the agencies assign staff who have expertise in the relevant areas of emergency communications to the ECPC.</p>
<p>Resources</p> <ul style="list-style-type: none"> <li>• How will the collaborative mechanism be funded and staffed?</li> <li>• Have online collaboration tools been developed?</li> </ul>	<p>DHS provides resources to support the ECPC and the member agencies use multiple online tools. Specifically, DHS provides support for data gathering, product development, meeting logistics, and transmitting products to the ECPC for review and approval. In addition, the ECPC uses online tools to share documents among the member agencies and has developed a collaboration portal specifically for the research and development focus group. As noted above, four member agencies we contacted said the agencies assign staff who have expertise in the relevant areas of emergency communications to the ECPC.</p>
<p>Written guidance and agreements</p> <ul style="list-style-type: none"> <li>• If appropriate, have participating agencies documented their agreement regarding how they will be collaborating?</li> </ul>	<p>The ECPC has developed guidance and agreements to direct the group including a charter and program plan. The ECPC charter defines the purpose, membership, responsibilities, and organization of the ECPC. The ECPC program plan includes the ECPC’s mission, organizational structure, responsibilities, partnerships, and program functions.</p>

Source: GAO key collaboration features and analysis of ECPC member agency documents and interviews. | GAO-16-681

We found the ECPC’s efforts were consistent with the key features related to leadership, participants, resources, and written guidance and agreements. However, the ECPC’s efforts were not completely consistent with the key features related to (1) outcomes and accountability, and (2) clarity of roles and responsibilities, as explained below.

**Outcomes and Accountability**

The ECPC has not documented its strategic goals and outcomes. We previously reported that establishing shared outcomes and goals that resonate with, and are agreed upon by all participants, is essential to achieving outcomes in interagency groups, but can also be challenging. Participants each bring different views, organizational cultures, missions, and ways of operating. Participants may even disagree on the nature of the problem or issue being addressed. Furthermore, agency officials involved in several of the interagency groups we previously reviewed cautioned that if agencies do not have a vested interest in the outcomes,

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and if outcomes are not aligned with agency objectives, participant agencies would not invest their limited time and resources.<sup>23</sup> However, by establishing outcomes and strategic goals based on the group's shared interests, a collaborative group can shape its vision and define its own purpose, and when articulated and understood by the group, this shared purpose provides a reason to participate. Although DHS identified four long-term goals for the ECPC in response to our questions, these goals do not appear in the ECPC charter, program plan, or *Annual Strategic Assessment*.<sup>24</sup> In May 2016, DHS officials told us the ECPC's Executive Committee agreed to develop a strategic plan to highlight the ECPC's goals and provide additional guidance for the focus groups. However, the DHS officials could not specify a time frame for completion. Without clearly defined strategic goals, the member agencies might not understand the ECPC's goals or have a chance to ensure that the goals align with their own agencies' purposes and goals. Furthermore, it remains unclear whether all member agencies have agreed on the ECPC's goals and outcomes. In fact, ECPC member agencies we spoke with were able to provide a general idea about the ECPC's purpose but could not articulate its specific goals.

Also with respect to outcomes and accountability, the ECPC does not track or monitor its recommendations. The ECPC uses its *Annual Strategic Assessment* to: (1) provide information on federal coordination efforts, (2) define opportunities for improving federal emergency communications, and (3) report on progress implementing some of the focus groups' recommendations. For example, the ECPC grants focus group made nine recommendations for federal grant program managers, including that the managers should use the *ECPC Financial Assistance Reference Guide* when planning and developing grant documents, and should invest in standards-based equipment. According to DHS, the grants focus group conducts annual surveys of member agencies to

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<sup>23</sup>GAO, *Managing for Results: Implementation Approaches Used to Enhance Collaboration in Interagency Groups*, [GAO-14-220](#) (Washington, D.C.: Feb. 14, 2014).

<sup>24</sup>The long-term goals identified by DHS are: (1) increase efficiencies at the federal level through joint investment and resource sharing; (2) improve alignment of strategic and operational emergency communications planning across levels of government; (3) improve alignment of federal investments in state/local/tribal capabilities to ensure focus on critical gaps and priorities; and (4) leverage collective resources to drive research and development and standards for existing and emerging technologies.

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assess whether the agencies had implemented any of these recommendations. However, recommendations made by the other ECPC focus groups are not tracked, and therefore it is unclear the extent to which the recommendations have been implemented by ECPC's member agencies. For example, the research and development focus group identified five recommendations in 2015 that were aimed at improving collaboration and information sharing around research and development for emergency communications. Specifically, one recommendation was for agencies to share technology profiles to prevent duplicative research. However, it is voluntary for member agencies to implement the focus group's recommendations, and it is unknown whether agencies are sharing their technology profiles or if duplicative research is being conducted. According to DHS officials, the ECPC does not have a mechanism to determine whether the focus groups' recommendations are implemented because it is up to the member agencies to decide if they will implement recommendations and if so, to track them on an individual basis. We have previously reported about the importance of federal agencies engaged in collaborative efforts to publicly report performance information as a tool for accountability.<sup>25</sup> By having a mechanism to track the focus groups' recommendations, the ECPC would have the means to monitor progress in achieving them.

## Clarity of Roles and Responsibilities

The ECPC has not clearly defined the roles and responsibilities of its member agencies. We previously reported that clarifying the roles of all member agencies will help establish an understanding of who will do what in support of the collaborative group.<sup>26</sup> In addition, member agencies' commitment to their defined roles helps the group overcome barriers to working in the collaborative group and can facilitate decision making within the group. The roles can be described in laws, policies, memorandums of understanding, or other documentation. As described in the ECPC charter, DHS is the administrator of the ECPC; however, it is unclear whether all member agencies have defined and agreed upon their respective roles and responsibilities. For example, the Department of Labor is a member of the ECPC, but according to DHS, it might not be clear to all members why the Department of Labor is a participating

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<sup>25</sup>GAO, *Managing for Results: Leading Practices Should Guide the continued Development of Performance.gov*, [GAO-13-517](#) (Washington, D.C.: June 6, 2013).

<sup>26</sup>[GAO-12-1022](#).

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member. Similarly, officials from the General Services Administration told us they do not know the roles of the other ECPC members and could only speak to us about their own agency's role. DHS officials told us it would be beneficial to have member agencies' roles and responsibilities clearly defined but expressed concern that some members, who participate voluntarily, might not want defined responsibilities if such responsibilities would require additional staff time and resources. Nevertheless, lacking defined roles and responsibilities may result in member agencies' not knowing their roles and responsibilities or those of other members, which may create additional barriers to effectively working together.

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## State Emergency Communications Planning Has Improved Since PKEMRA, but States Face Funding and Other Challenges

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### States' Planning and Governance Structures have Improved since PKEMRA

States, the District of Columbia, and territories (hereafter, states) responding to our survey reported that to better prepare for emergency communications during disasters, they have: (1) developed emergency communications plans, (2) established the Statewide Interoperability Coordinator (SWIC) positions, and (3) implemented governance structures to oversee emergency communications planning.<sup>27</sup>

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<sup>27</sup>We surveyed SWICs in 50 states, the District of Columbia, and 5 territories. We received 52 responses to the survey; we did not receive a response from one state (Massachusetts) and three territories (American Samoa, the Commonwealth of the Northern Mariana Islands, and Puerto Rico). Because of skip patterns within our survey, not all respondents had the opportunity to answer each question and some respondents decided not to respond to particular questions.

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## States' Emergency Communications Plans

States have made progress since PKEMRA in establishing emergency communications plans. Based on survey responses, prior to the enactment of PKEMRA in 2006, only a few states had emergency communications plans in place. In 2007, OEC began requiring states to have a Statewide Communications Interoperability Plan (SCIP) to be eligible for DHS's Interoperable Emergency Communications Grant Program. These state emergency communications plans are intended to be comprehensive strategic plans that outline the current and future emergency communications environment in a state. The NECP encourages states to align their plans with the emergency communications goals in the NECP to establish a link between national communications priorities and state emergency communications planning. Of the states responding to our survey, 51 reported having a SCIP,<sup>28</sup> and 36 state plans were implemented after PKEMRA's enactment. In addition to the SCIP, 16 states reported having other planning documents that support operational plans for emergency communications in addition to the high-level strategic plan the SCIP represents. For example, some states reported using tactical documents such as the Tactical Interoperability Communications Plan as their primary emergency communications planning document.<sup>29</sup>

The 2014 NECP encouraged states to update their plans and procedures to enhance emergency communications during disasters, and 46 states responding to our survey reported that they had updated their plans. States reported updating their plans for various reasons, including reflecting routine review processes, technological advancement, and changes in state governance, among others. According to DHS, as of the end of fiscal year 2015, OEC worked with 53 states and territories to update their SCIPs to align with the 2014 NECP. In response to our survey, 50 states reported being satisfied with the level of support for emergency communications planning they received from OEC.

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<sup>28</sup>In response to our survey, one state reported not having a SCIP because the plan was more than 6 years old at the time of our review and was not endorsed by the state's past administration.

<sup>29</sup>According to DHS, a Tactical Interoperable Communications Plan is a plan providing rapid provision of on-scene, incident based mission critical voice communications among all first responder agencies (e.g., emergency medical services, fire, and law enforcement), as appropriate for the incident, and in support of an incident command system.

Further, as shown in table 4, most of the states responding to our survey reported that they now have plans that contain the key elements of the SAFECOM Interoperability Continuum.<sup>30</sup> The NECP considers the SAFECOM Interoperability Continuum as the essential foundation for achieving the NECP goals.

**Table 4: Number of States Reporting That Their Emergency Communications Plans Contain SAFECOM Elements**

SAFECOM element	Summary of element	Number of state plans with element
Governance	Establishing a governing structure to provide a framework for collaboration and decision making that aligns with a common objective.	48
Standard operating procedures	Developing formal written guidelines for incident response that enable responders to successfully coordinate emergency response.	48
Technology	Implementing data and voice technology that meets the needs of emergency responders; successful use of technology is supported by strong governance.	46
Training and exercises	Implementing effective programs that allow responders to practice communication interoperability.	45
Usage	Using interoperable communications technologies.	41

Source: GAO survey of Statewide Interoperability Coordinators and SAFECOM documentation. | GAO-16-681

According to the NECP, first responders' proficiency with communications equipment and their ability to execute policies, plans, and procedures can improve with training and exercises. In response to our survey, 40 states reported conducting training and exercises based on their emergency communications plans. Furthermore, the NECP notes that training and exercises helps emergency responders be properly prepared to respond to disasters and 43 states reported that they are likely to use their emergency communications plans when responding to future disasters.

### Statewide Interoperability Coordinator (SWIC) Position

Since PKEMRA, states have made considerable progress in establishing a key coordinator position. The SWIC provides a single point of contact for statewide emergency communications activities. The NECP identifies

<sup>30</sup>The SAFECOM Interoperability Continuum is designed to assist emergency response agencies and policy makers to plan and implement interoperable data and voice communications and contains five key elements: governance, standard operating procedures, technology, training and exercises, and usage of interoperable communications.

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the SWIC as a key stakeholder in emergency communications. In 2008, DHS noted that the lack of SWICs in each state was a primary obstacle to improving emergency communications and recommended that every state have a SWIC within 12 months. All but two states responding to our survey reported that they now have a SWIC. DHS officials stressed the importance of the SWIC position and told us that SWICs can contribute to emergency communications initiatives by supporting the development of governance structures, standard operating procedures, and high-level policy. In addition, SWICs can coordinate grants and other types of funding and training and exercises, and support implementation of the SCIPs.

Although DHS has stressed the importance of the SWIC position, according to our survey, most SWICs now have responsibilities outside those of the SWIC role. In December 2009, according to DHS, 44 states had a full time SWIC, but most survey respondents reported that their SWICs now have other non-SWIC responsibilities. In particular, 37 states responding to our survey have SWICs with additional non-SWIC related responsibilities. For example, 21 SWICs are also the FirstNet Single Point of Contact.<sup>31</sup> States funded the SWIC position in part by the Interoperable Emergency Communications Grant Program. According to DHS, funds were not appropriated for this grant program after 2010. Subsequently, funding dedicated to improving interoperability was used for other DHS grant programs that supported improving emergency preparedness, which included interoperable emergency communications. According to our survey results, 26 SWIC positions are funded by federal grants, state grants, or a combination of both federal and state grants. In April 2016, the House of Representatives acknowledged the importance of the SWIC position by passing the Promoting Resilience and Efficiency in Preparing for Attacks and Responding to Emergencies Act, which includes a provision that would require states to have a SWIC position or delegate the responsibilities to other individuals.<sup>32</sup>

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<sup>31</sup>FirstNet is required to work with the states' Single Points of Contact who have been designated by each state, territory, and Washington, D.C. 47 U.S.C. § 1426(c)(2)(B).

<sup>32</sup>H.R. 3583, 114<sup>th</sup> Cong. (2016).

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## Governance Structures

Since PKEMRA, the NECP identified the need for formal governance structures to manage the systems of people, organizations, and technologies that need to collaborate to effectively plan for emergency communications during disasters, and most states responding to our survey reported that they have governance structures in place. According to DHS, governance structures should include key emergency communications stakeholders such as emergency communications leaders, multiple agencies, jurisdictions, disciplines, subject matter experts, and private sector entities, among others to enhance information sharing and ensure emergency communications needs are represented. Almost all of states (49) responding to our survey reported having governance structures in place that include key stakeholders. For example, 48 states reported that their governance bodies include emergency responders from local agencies while 33 states reported that non-government stakeholders, such as the Red Cross, are included. In response to our survey, 24 states reported that their governance bodies meet 3 to 7 times a year, and the governance bodies for 16 other states meet 8 to 12 times a year while the remaining states with governance structures meet less than 3 times a year.

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## Funding and Other Challenges Remain

In our survey, we asked states about the challenges that affect their ability to ensure operable and continuous emergency communications during disasters and states identified a lack of funding as the primary challenge. In particular, 48 states responding to our survey indicated that a lack of funding sometimes or always affected their state's ability to ensure operable and continuous emergency communications during disasters. In written comments, 12 states specifically identified the need for dedicated funding for emergency communications including funds to support the role of the SWIC. For example, one state reported that when it no longer received federal funding for emergency communications, the state lost its full time SWIC position, support personnel, and governance group. In addition, 45 states responding to our survey mentioned that the lack of staffing sometimes or always presented a challenge for their states. In the written responses, one state indicated that the lack of staffing was difficult to address because of the funding issue, while another indicated the state was under a hiring freeze. In other written responses to our survey, states identified additional challenges. For example, six states mentioned issues with technology, such as challenges in learning to use different radio systems and understanding new and emerging technologies.

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We also asked the states if they have experienced interoperability difficulties when communicating or attempting to communicate with federal partners during disasters. In response, 23 states reported that they have experienced difficulties and noted in written comments that the issues included a lack of understanding by federal responders about the local radio systems, federal radios not configured to the interoperable channels or talk groups, and federal responders not using the statewide system.<sup>33</sup> Furthermore, two states noted a lack of planning between federal and state entities prior to emergencies that led to federal responders trying to figure out the systems during the emergency.

Some states responding to our survey reported that they have taken action to address challenges related to funding, technology, and interoperability concerns with federal partners. First, related to funding, some states reported pursuing state level funding and grants to continue emergency communications governance and planning, including funding the SWIC position and building statewide emergency communications systems. Second, some states reported addressing technology challenges through training and upgrading old communication systems. For example, one state reported that his state provides training to emergency responders on radio operations and how to effectively use talk groups. Another state reported his state is upgrading its 26-year old land mobile radio system so that emergency responders can more effectively communicate within the state and during emergencies. Lastly, some states reported that they are trying to address interoperability issues through training and the purchase of interoperable equipment. For example, the training can improve coordination with federal and other users that can result in improved interoperability during emergencies. In addition, by purchasing interoperable equipment, emergency personnel could have fewer issues connecting with emergency responders at all levels of government. One state indicated that his state provided information on interoperable equipment to local entities to promote the purchase of such equipment. According to DHS officials, they continue to provide training programs to the states to help improve interoperability.

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<sup>33</sup>Radio users can be connected and structured into talk groups, which allow the users to easily share communications and information.

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## Conclusions

PKEMRA established the ECPC to improve coordination and information sharing among federal emergency communications programs. As a collaborative entity, we found that while the ECPC's efforts were consistent with most of the key features for effective collaboration, its efforts were not completely consistent with key features related to outcomes and accountability and clarity of roles and responsibilities. Regarding outcomes and accountability, the ECPC has not documented its strategic goals or established a mechanism to track the outcomes of the focus group's recommendations. DHS officials told us the ECPC has agreed to develop a strategic plan that would contain goals for the ECPC, but there is no firm timetable for such a plan to be completed. Lacking clearly defined strategic goals, the ECPC's member agencies might not understand the ECPC's goals or have a chance to ensure that the goals align with their own agencies' purposes and goals. Furthermore, the ECPC's focus groups have spent time and resources to make recommendations for improving emergency communications, but we found the focus groups' recommendations, such as those related to federal grant programs and research and development efforts, are implemented at the discretion of the member agencies. Without a mechanism to track the recommendations, it is unclear the extent to which the recommendations are being implemented by the member agencies, and the ECPC is missing an opportunity to monitor its efforts. Regarding clarity of roles and responsibilities, the ECPC has not defined the member agencies' roles and responsibilities, and some member agencies do not know the roles and responsibilities of other members, a situation that may create barriers to working together effectively. Clearly defining the members' respective roles and responsibilities would help to provide an understanding of who will do what to support the ECPC's efforts and facilitate decision making.

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## Recommendations for Executive Action

To improve the effectiveness, transparency, and accountability of the ECPC's efforts, we recommend that the Secretary of Homeland Security, as the administrative leader of the ECPC, take the following actions:

- clearly document the ECPC's strategic goals;
- establish a mechanism to track progress by the ECPC's member agencies in implementing the ECPC's recommendations; and
- clearly define the roles and responsibilities of the ECPC's member agencies.

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## Agency Comments

We provided a draft of this report to DHS, Commerce, and FCC for their review and comment. In response, DHS provided written comments, which are reprinted in appendix III. In written comments, DHS concurred with our recommendations and provided an attachment describing the actions it would take to implement the recommendations. DHS noted that enhancing the communications capabilities for emergency responders is one of its top priorities and that DHS will use the recommendations provided in our report to enhance a DHS initiative aimed at remediating many of the foremost emergency communications challenges facing our nation. Separately, DHS, Commerce, and FCC provided technical comments that we incorporated as appropriate.

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As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution until 30 days from the report date. At that time, we will send copies to the Secretaries of Homeland Security and Commerce, the Chairman of FCC, and appropriate congressional committees. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or members of your staff have any questions about this report, please contact me at (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Major contributors to this report are listed in appendix IV.



Mark L. Goldstein  
Director, Physical Infrastructure Issues

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*List of Requesters*

The Honorable Ron Johnson  
Chairman  
Committee on Homeland Security and Governmental Affairs  
United States Senate

The Honorable Michael McCaul  
Chairman  
The Honorable Bennie Thompson  
Ranking Member  
Committee on Homeland Security  
House of Representatives

The Honorable Daniel M. Donovan, Jr.  
Chairman  
The Honorable Donald M. Payne, Jr.  
Ranking Member  
Subcommittee on Emergency Preparedness, Response, and  
Communications  
Committee on Homeland Security  
House of Representatives

The Honorable Susan Brooks  
House of Representatives

The Honorable Martha McSally  
House of Representatives

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# Appendix I: Objectives, Scope, and Methodology

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This report focuses on three Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA) emergency communications provisions related to planning and federal coordination: the Office of Emergency Communications (OEC), the National Emergency Communications Plan (NECP), and the Emergency Communications Preparedness Center (ECPC). Specifically, we examined (1) federal efforts to implement these PKEMRA emergency communications provisions and (2) how states' emergency communications planning has changed since PKEMRA and what challenges remain for the states.

To determine federal efforts to implement the three PKEMRA emergency communications provisions, we reviewed our 2008 report<sup>1</sup> and other relevant reports and documentation from the Department of Homeland Security (DHS), such as DHS's biennial reports to Congress on emergency communications, and reports from other agencies, such as the Federal Communications Commission's (FCC) 911 and Enhanced 911 services report. We also reviewed the NECP from 2008 and the subsequent reports on the progress meeting its goals, as well as the 2014 NECP. We interviewed officials from DHS, FCC, and the Department of Commerce (Commerce) to determine their roles and the progress implementing the provisions. We compiled information from the reports and interviews to assess how the provisions were implemented and if they were fully implemented. To understand the ECPC's collaborative practices, we reviewed the ECPC charter, program plan, and *Annual Strategic Assessments* prepared for Congress, and interviewed ECPC member agencies. Specifically, we interviewed 5 of 14 ECPC member agencies (DHS, FCC, Commerce, the Department of Transportation, and the General Services Administration) to determine their roles on the ECPC, their understanding of the ECPC goals, and the member agencies' responsibilities. We selected agencies to interview with a range of emergency communications experience, and the views we obtained do not necessarily represent the views of all ECPC member agencies. We assessed the ECPC's collaborative efforts against six of seven key

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<sup>1</sup>[GAO-09-59R](#).

considerations for implementing collaborative mechanisms that we identified in a September 2012 report.<sup>2</sup>

To understand how state emergency communications planning has changed since PKEMRA and the challenges states still face, we surveyed Statewide Interoperability Coordinators (SWIC) in 50 states, the District of Columbia, and 5 territories. The list of SWICs was obtained from DHS and confirmed via email. We conducted a web-based survey that addressed issues pertaining to state planning, governance, and challenges, specifically asking about the Statewide Communications Interoperability Plan (SCIP) and other emergency communications plans, and the role of the SWIC. To ensure the survey questions were clear and logical, we pretested the survey with three states: North Dakota, Texas, and Wyoming. These states were selected based on the types of disasters facing the states, the number of recent disasters, and geographic diversity. We administered our survey from February 2016 to April 2016 and received 52 responses for a 93 percent response rate. American Samoa, Massachusetts, the Northern Mariana Islands, and Puerto Rico did not respond to our survey. In addition, we interviewed selected SWICs from Kentucky and Wyoming to understand how the SCIPs and other emergency communications plans are used in preparing for emergencies. We selected these SWICs to interview based on geographic region, an occurrence of a recent disaster in the state, and because the Wyoming SWIC was the chair of the National Council of Statewide Interoperability Coordinators. We conducted semi-structured interviews with each SWIC to understand if they had a SCIP, how they used the SCIP, the governance structures the state uses to manage emergency communications, and the challenges their states encounter with emergency communications during disasters.

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<sup>2</sup>GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012). In this report, we built on our prior work that identified key practices for Congress and others to consider when implementing collaborative mechanisms, see GAO, *Results-Oriented Government: Practices That Can Help Enhance and Sustain Collaboration among Federal Agencies*, [GAO-06-15](#) (Washington, D.C.: Oct. 21, 2005). We did not assess the ECPC's efforts against one of the key features identified in [GAO-12-1022](#), bridging organizational cultures, because this would have included reviewing the organizational cultures of 14 participating agencies, which was outside our scope.

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# Appendix II: Survey of Statewide Interoperability Coordinators

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The questions we asked in our survey of Statewide Interoperability Coordinators and the aggregate results of responses to the closed-ended questions are shown below. We do not provide results for the open-ended questions. We received 52 completed survey responses.<sup>1</sup> However, all respondents did not have the opportunity to answer each question because of skip patterns, and some respondents decided not to respond to particular questions. For a more detailed discussion of our survey methodology see appendix I.

## State Emergency Communications Plan

1. Does your state have a Statewide Communications Interoperability Plan (SCIP)?

Response	Number of responses
Yes	51
No	1
No answer/not checked	0

1a. If no, why doesn't your state have a SCIP?

(Written responses not included)

1b. Does your state have a primary planning document for ensuring operable and interoperable emergency communications during disasters in your state?

Response	Number of responses
Yes	0
No	1
No answer/not checked	51

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<sup>1</sup>American Samoa, Massachusetts, the Northern Mariana Islands, and Puerto Rico did not complete our survey.

1c. Is your SCIP your primary plan to ensure operable and interoperable emergency communications during disasters in your state?

Response	Number of responses
Yes	33
No	16
No answer/not checked	3

1d. If no, what, is your primary planning document for ensuring, operable, and interoperable emergency communications during disasters in your state?

(Written responses not included)

2. What year was the emergency communications plan implemented?

Response	Number of respondents
Prior to 2000	3
2000	2
2001	0
2002	1
2003	1
2004	1
2005	0
2006	2
2007	13
2008	8
2009	5
2010	2
2011	1
2012	2
2013	3
2014	1
2015	1
Not implemented	2
No answer/not checked	4

3. Has your state used the emergency communications plan in response to disasters?

Response	Number of responses
Yes – always used	18
Yes – but not always	17
No – never used	5
No – no disasters	2
Don't know	5
No answer/not checked	5

3a. If the emergency communications plan has never been used in response to disasters, why not?

(Written responses not included)

4. Has your state used the emergency communications plan during training exercises?

Response	Number of responses
Yes – always used	18
Yes – but not always	22
No – never used	4
No – no exercises performed	0
Don't know	3
No answer/not checked	5

4a. If the emergency communications plan has never been used during training exercises, why not?

(Written responses not included)

5. Are you likely to use the emergency communications plan in response to disasters in the future?

Response	Number of responses
Yes	43
No	6
No answer/not checked	3

6. Has the emergency communications plan been updated since it was initially implemented?

Response	Number of responses
Yes	46
No	1
No answer/not checked	5

6a. When was the emergency communications plan last updated?

Response	Number of responses
2015	26
2014	11
2013	4
2012	5
No answer/not checked	6

6b. Why was the emergency response plan updated?

(Written responses not included)

6c. Do you think your plan needs to be updated?

Response	Number of responses
Yes	1
No	0
No answer/not checked	51

6d. If yes, why hasn't the emergency response plan been updated?

(Written responses not included)

**Elements of the Emergency Communications Plan**

7. Does your emergency communications plan address the following elements?

	<b>Response</b>	<b>Number of responses</b>
Governance	Yes	48
	No	3
	Not applicable – don't have a plan	0
	Don't know	0
	No answer/not checked	1
Planning (standard operating procedures, protocols)	Yes	48
	No	2
	Not applicable – don't have a plan	1
	Don't know	0
	No answer/not checked	1
Technology (data and voice elements, common applications, base sharing, custom applications, swapping radios, gateways)	Yes	46
	No	4
	Not applicable – don't have a plan	1
	Don't know	0
	No answer/not checked	1
Training and exercises	Yes	45
	No	6
	Not applicable – don't have a plan	0
	Don't know	0
	No answer/not checked	1
Usage (how often interoperability communications are used in planned events, localized emergency incidents, regional incidents, and daily use)	Yes	41
	No	10
	Not applicable – don't have a plan	0
	Don't know	0
	No answer/not checked	1

8. Does your emergency communications plan address the following types of events?

	Response	Number of responses
Significant events (i.e., terrorist attacks, major disaster, and other emergencies that pose the greatest risk to the state)	Yes	33
	No	15
	Not applicable – don't have a plan	3
	Don't know	0
	No answer/not checked	1
Routine events (i.e., localized emergency incidents, regional emergency incidents, special events, large public gatherings, state and national exercise)	Yes	36
	No	12
	Not applicable – don't have a plan	3
	Don't know	0
	No answer/not checked	1
Other events	Yes	13
	No	22
	Not applicable – don't have a plan	3
	Don't know	0
	No answer/not checked	14

If "Other standardized elements" is checked, what other elements are contained in your operating protocols and procedures?

(Written responses not included)

**Planning and Standard Operating Procedures**

9. Does your emergency communications plan contain the following standardized elements in your operating protocols and procedures?

	<b>Response</b>	<b>Number of responses</b>
Common plain language radio practices	Yes	40
	No	11
	Don't know	0
	No answer/not checked	1
Uniform common channel naming	Yes	37
	No	13
	Don't know	0
	No answer/not checked	2
Designated interoperability channels	Yes	41
	No	10
	Don't know	0
	No answer/not checked	1
Other standardized elements that allow for information sharing	Yes	24
	No	15
	Don't know	4
	No answer/not checked	9

If "Other standardized elements" is checked, what other elements are contained in your operating protocols and procedures?

(Written responses not included)

**Governance**

10. Does your state have a Statewide Interoperability Coordinator (SWIC)?

<b>Response</b>	<b>Number of responses</b>
Yes	50
No	2
No answer/not checked	0

10a. What best describes the SWIC in your state?

Response	Number of responses
Full-time: SWIC responsibilities only	6
Full-time: SWIC and other responsibilities	37
Other	7
Don't Know	0
No answer/not checked	2

10b. If "Other" is checked, what describes the SWIC in your state?

(Written responses not included)

10c. How, if at all, have current SWIC responsibilities changed in the past 5 years?

Response	Number of responses
SWIC responsibilities only to SWIC and other responsibilities	15
SWIC and other responsibilities to SWIC responsibilities only	4
Other change	10
No change	13
Don't Know	7
No answer/not checked	3

10d. If "Other change" is checked, what other SWIC responsibilities have changed in the past 5 years?

(Written responses not included)

10e. Does the SWIC also serve in the role of the FirstNet state Point of Contact (SPOC)?

Response	Number of responses
Yes	21
No	29
No answer/not checked	2

10f. How is the SWIC position in your state funded?

Response	Number of responses
Federal grant only	9
State grant only	10
Federal and state grants	7
Don't know	5
No answer/not checked	21

10g. To what extent have the following factors contributed to your state NOT having a SWIC?

	Response	Number of responses
Lack of funding	Great extent	2
	Moderate extent	0
	Little extent	0
	No extent	0
	Not applicable	0
	Don't know	0
	No answer/not checked	50
Lack of qualified candidates	Great extent	0
	Moderate extent	0
	Little extent	0
	No extent	2
	Not applicable	0
	Don't know	0
	No answer/not checked	50
Federal legislative barriers	Great extent	1
	Moderate extent	0
	Little extent	0
	No extent	0
	Not applicable	1
	Don't know	0
	No answer/not checked	50
State legislative barriers	Great extent	0
	Moderate extent	0
	Little extent	0
	No extent	1

**Appendix II: Survey of Statewide Interoperability Coordinators**

	<b>Response</b>	<b>Number of responses</b>
	Not applicable	1
	Don't know	0
	No answer/not checked	50
Other factor	Great extent	0
	Moderate extent	0
	Little extent	0
	No extent	0
	Not applicable	1
	Don't know	0
	No answer/not checked	51

If "Other factor" is checked, what other factors contributed to your state not having a SWIC?

(Written responses not included)

11. Does your state have a governance body supporting emergency communications planning?

<b>Response</b>	<b>Number of responses</b>
Yes	49
No	2
No answer/not checked	1

11a. Generally, how often does the governance body in your state meet to discuss planning efforts to ensure emergency communications during disasters?

<b>Response</b>	<b>Number of responses</b>
8 to 12 times a year	16
3 to 7 times a year	24
1 to 2 times a year	8
Less than once a year	1
Never	0
Don't know	0
No answer/not checked	3

11b. Are public safety representatives from the following categories represented in your governance body?

	Response	Number of responses
Local	Yes	48
	No	0
	Not applicable	1
	Don't know	0
	No answer/not checked	3
State/ Territory	Yes	47
	No	0
	Not applicable	0
	Don't know	0
	No answer/not checked	5
Federal	Yes	30
	No	18
	Not applicable	0
	Don't know	0
	No answer/not checked	4
Tribal	Yes	24
	No	7
	Not applicable	15
	Don't know	0
	No answer/not checked	6
International (states/territories near national borders)	Yes	5
	No	27
	Not applicable	12
	Don't know	0
	No answer/not checked	8
Non-Government (i.e., American Red Cross, public safety association groups, etc.)	Yes	33
	No	13
	Not applicable	1
	Don't know	0
	No answer/not checked	5
Other public safety representatives	Yes	40
	No	3
	Not applicable	2
	Don't know	0

11c. If no, what entities and individuals are responsible for overseeing emergency communications in the state?

(Written responses not included)

12. Generally, how involved are the public safety representatives from the following categories in the planning and coordinating efforts to ensure continuous operable emergency communications in your state?

	<b>Response</b>	<b>Number of responses</b>
Local	Highly involved	29
	Moderately involved	19
	Not Involved	1
	Not applicable	1
	Don't know	0
	No answer/not checked	2
State/Territory	Highly involved	37
	Moderately involved	13
	Not Involved	0
	Not applicable	0
	Don't know	0
	No answer/not checked	2
Federal	Highly involved	13
	Moderately involved	22
	Not Involved	10
	Not applicable	2
	Don't know	0
	No answer/not checked	5
Tribal	Highly involved	6
	Moderately involved	13
	Not Involved	10
	Not applicable	16
	Don't know	0
	No answer/not checked	7
International (states/territories near national borders)	Highly involved	4
	Moderately involved	8
	Not Involved	15
	Not applicable	18

**Appendix II: Survey of Statewide Interoperability Coordinators**

	<b>Response</b>	<b>Number of responses</b>
Local	Highly involved	29
	Moderately involved	19
	Not Involved	1
	Not applicable	1
	Don't know	0
	No answer/not checked	2
	Don't know	0
	No answer/not checked	7
Non-Government (i.e., American Red Cross, public safety association groups, etc.)	Highly involved	12
	Moderately involved	23
	Not Involved	11
	Not applicable	2
	Don't know	0
	No answer/not checked	4
Other public safety representatives	Highly involved	14
	Moderately involved	25
	Not Involved	4
	Not applicable	3
	Don't know	0
	No answer/not checked	6

**Federal Support**

13. In developing and/or maintaining your state's emergency communications plan, have you received technical assistance services offered by the Office of Emergency Communications (OEC) within the Department of Homeland Security?

<b>Response</b>	<b>Number of responses</b>
Yes	52
No (requested not received)	0
No (not requested)	0
Don't know	0
No answer/not checked	0

14. Overall, how satisfied or dissatisfied are you with the level of support for emergency communications planning from the OEC?

Response	Number of responses
Very satisfied	43
Moderately satisfied	7
Neither satisfied nor dissatisfied	2
Moderately dissatisfied	0
Very dissatisfied	0
No answer/not checked	0

15. Have you experienced interoperability difficulties when communicating or attempting to communicate with federal partners during disasters?

Response	Number of responses
Yes	23
No	20
No answer/not checked	9

15a. If yes, what interoperability difficulties did you experience when communicating or attempting to communicate with federal partners?

(Written responses not included)

16. Since 2008, has your state received federal grant funding in support of emergency communications?

Response	Number of responses
Yes	45
No	4
No answer/not checked	3

16a. What areas did the grant funding support?

	Response	Number of responses
Governance	Yes	27
	No	12
	Don't know	2
	No answer/not checked	11
Planning (standard operating procedures, protocols)	Yes	34
	No	5
	Don't know	2
	No answer/not checked	11
Technology (data and voice elements, common applications, base sharing, custom applications, swapping radios, gateways)	Yes	41
	No	2
	Don't know	1
	No answer/not checked	8
Training and exercises	Yes	39
	No	3
	Don't know	2
	No answer/not checked	8
Usage (how often interoperability communications are used in planned events, localized emergency incidents, regional incidents, and daily use)	Yes	27
	No	9
	Don't know	4

17. How, if at all, has the federal grant funding your state received in support of emergency communications changed in the past 5 years?

Response	Number of responses
Increased	5
Decreased	39
No change- (about the same)	1
Don't know	5
No answer/not checked	2

18. What additional federal efforts, if any, are needed to help ensure operable, interoperable, and continuous emergency communications in your state during disasters?

(Written responses not included)

Challenges

19. Generally, how often, if at all, do the following challenges affect your state’s ability to ensure operable and continuous emergency communications during disasters in your state?

	<b>Response</b>	<b>Number of responses</b>
Lack of staff	Always or often	24
	Sometimes	21
	Rarely or never	4
	Not applicable	0
	Don’t know	3
	No answer/not checked	0
Lack of funding	Always or often	32
	Sometimes	16
	Rarely or never	2
	Not applicable	0
	Don’t know	2
	No answer/not checked	0
State legislative barriers	Always or often	5
	Sometimes	22
	Rarely or never	16
	Not applicable	1
	Don’t know	5
	No answer/not checked	3
Federal legislative barriers	Always or often	8
	Sometimes	17
	Rarely or never	15
	Not applicable	1
	Don’t know	8
	No answer/not checked	3
Knowledgeable personnel	Always or often	5

**Appendix II: Survey of Statewide Interoperability Coordinators**

	<b>Response</b>	<b>Number of responses</b>
	Sometimes	22
	Rarely or never	22
	Not applicable	0
	Don't know	3
	No answer/not checked	0
Resistance to change		
	Always or often	7
	Sometimes	27
	Rarely or never	14
	Not applicable	1
	Don't know	2
	No answer/not checked	1
Other challenges		
	Always or often	8
	Sometimes	11
	Rarely or never	6
	Not applicable	3
	Don't know	2
	No answer/not checked	22

If "Other challenge" is checked, what other challenges affect your state's ability to ensure operable and continuous emergency communications during disasters?

(Written responses not included)

20. What actions, if any, has your state taken to address the items you identified as challenges in question 19?

(Written responses not included)

21. What actions, if any, can the federal government take to address the items you identified as challenges in question 19?

(Written responses not included)

22. If you would like to expand upon any of your responses to the questions above, or have any other comments about your state's

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**Appendix II: Survey of Statewide  
Interoperability Coordinators**

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planning efforts to ensure operable and interoperable emergency communications, please enter them below.

(Written responses not included)

# Appendix III: Comments from Department of Homeland Security

U.S. Department of Homeland Security  
Washington, DC 20528



**Homeland  
Security**

July 7, 2016

Mark L. Goldstein  
Director, Physical Infrastructure Issues  
U.S. Government Accountability Office  
441 G Street, NW  
Washington, DC 20548

Re: Management's Response to Draft Report GAO-16-681, "EMERGENCY COMMUNICATIONS: Effectiveness of the Post-Katrina Interagency Coordination Group Could Be Enhanced"

Dear Mr. Goldstein:

Thank you for the opportunity to review and comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

The Department is pleased to note GAO's positive recognition of the actions the National Protection and Programs Directorate's (NPPD) Office of Emergency Communications (OEC) has taken to implement the Post-Katrina Emergency Management Reform Act of 2006 (PKEMRA) and ensure federal, state, local, tribal, and territorial agencies have the plans, resources, and training they need to support interoperable emergency communications.

Established in 2007, in response to communications challenges faced during the attacks on September 11, 2001, and Hurricane Katrina, the OEC supports and promotes communications used by emergency responders and government officials to keep America safe, secure, and resilient. NPPD's OEC leads the Nation's operable and interoperable public safety and national security and emergency preparedness communications efforts. OEC provides training, coordination, tools, and guidance to help its federal, state, local, tribal, territorial and industry partners develop their emergency communications capabilities. OEC's programs and services coordinate emergency communications planning, preparation and evaluation, to ensure safer, better-prepared communities nationwide. The survey results reported by GAO in this report demonstrate that the OEC has been a responsive and effective partner to the states receiving technical assistance provided by the OEC.

Enhancing the communications capabilities of this Nation's emergency responders is one of DHS' top priorities. The Department will use the recommendations provided in this report

to enhance Secretary Johnson's *Strengthening Departmental Unity of Effort* initiative and expand its general principles beyond DHS. This effort will include our other federal, state, local, tribal, and territorial partners and help to remediate many of the foremost emergency communication challenges that our Nation faces.

The draft report contained three recommendations with which the Department concurs. Please see the attached for our detailed response to each recommendation.

Again, thank you for the opportunity to review and comment on this draft report. Technical comments were previously provided under separate cover. Please feel free to contact me if you have any questions. We look forward to working with you in the future.

Sincerely,



J. H. CRUMPACKER, CIA, CFE  
Director  
Departmental GAO-OIG Liaison Office

**Attachment: DHS Management Response to Recommendations  
Contained in GAO-16-681**

GAO recommended that the Secretary of Homeland Security, as the administrative leader of the ECPC (Emergency Communications Preparedness Center):

**Recommendation 1:** Clearly document the ECPC's strategic goals.

**Response:** Concur. At the ECPC's Executive Committee (EC) meeting held in May 2016, the EC tasked the steering committee to develop a work plan to accomplish the Annual Strategic Assessment (ASA) recommendations. This work plan will include the ECPC's strategic goals and provide for updates and modifications, as required. In addition, the work plan will review past and present annual strategic assessments to identify common themes provided by the ECPC membership with an emphasis on any requirements and goals to address emergency communications issues.

Establishing shared outcomes and goals that are agreed upon by all participants is essential to achieving desired results in interagency groups. Moving forward, the ECPC will develop a common theme that is based on ECPC members' input and verification. A draft document will be presented to the steering committee in September 2016, including the anticipated finalized program plan that will assist member Departments and Agencies in addressing their goals, potential issues and identified capabilities and/or resource gaps. Estimated Completion Date (ECD): December 31, 2016.

**Recommendation 2:** Establish a mechanism to track progress by the ECPC member agencies in implementing the ECPC's recommendations.

**Response:** Concur. As part of the work plan described above, the ECPC support team, staffed by NPPD's OEC, will establish pages (or forms) for Departments and Agencies to update on a periodic basis. These pages will be housed on Office of Management and Budget's MAX database system, a Government-wide advanced collaboration, information sharing, data collection, publishing, and analytical capability site for Federal agencies and partners, and used by the ECPC. These updates will include progress by the Departments and Agencies on the identified gaps, issues and goals as listed in the compilation document developed from the ASA. In addition, during the annual ASA interviews, the progress reports will be reviewed with the member Departments and Agencies. ECD: December 31, 2016.

**Recommendation 3:** Clearly define the roles and responsibilities of the ECPC's member agencies.

**Response:** Concur. The ECPC is set up as a clearinghouse, which was established as an information sharing forum for members across the 14 Departments and Agencies. The work that is performed by the Departments and Agencies is all voluntary and recommendations from the ECPC come without tasking or funding authorities. However, NPPD's OEC will make the following recommendations to the ECPC Steering Committee at the September 2016 meeting for consideration/action, as deemed appropriate, with the goal of completing any follow-on work within the next year:

- Identify the mission of each of the ECPC member Departments and Agencies.
- Determine the roles and responsibilities that are required and appropriate to support the ECPC.
- Validate the roles and responsibilities against individual Department and Agency missions.
- Assign roles and responsibilities to Departments and Agencies commensurate with their mission.

ECD: July 31, 2017.

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# Appendix IV: GAO Contact and Staff Acknowledgments

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## GAO Contact

Mark Goldstein, (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov)

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## Staff Acknowledgments

In addition to the individual named above, Sally Moino (Assistant Director), Enyinnaya David Aja, Cynae Derose, Eric Hudson, Cheryl Peterson, Kelly Rubin, Erik Shive, Andrew Stavisky, and Nancy Zearfoss made key contributions to this report.

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