



December 2018

# EMERGENCY COMMUNICATIONS

Office of Emergency  
Communications  
Should Take Steps to  
Help Improve External  
Communications

# GAO Highlights

Highlights of [GAO-19-171](#), a report to congressional committees

## Why GAO Did This Study

Public-safety communications systems are used by thousands of federal, state, and local jurisdictions. It is vital that first responders have communications systems that allow them to connect with their counterparts in other agencies and jurisdictions. OEC offers written guidance, governance planning, and technical assistance to help ensure public-safety entities have the necessary plans, resources, and training to support emergency communications. FirstNet, an independent authority within the Department of Commerce, is establishing a public-safety network.

GAO was asked to review OEC's efforts related to interoperable emergency communications. This report examines (1) OEC's and FEMA's collaborative efforts to develop grant guidance; (2) how OEC incorporates FirstNet's network and other emerging technologies into its plans and offerings; and (3) the extent to which OEC has assessed its methods of communication. GAO evaluated OEC's and FEMA's coordination against GAO's leading practices for interagency collaboration; surveyed all 54 state-designated SWICs; evaluated OEC's communications efforts against federal internal control standards; and interviewed officials that represented various areas of public safety.

## What GAO Recommends

OEC should assess its methods of communication to help ensure it is using the appropriate tools in communicating with external stakeholders. DHS concurred with the recommendation.

View [GAO-19-171](#). For more information, contact Mark Goldstein at (202) 512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov).

December 2018

## EMERGENCY COMMUNICATIONS

### Office of Emergency Communications Should Take Steps to Help Improve External Communications

## What GAO Found

The Department of Homeland Security's (DHS) Office of Emergency Communications (OEC) and the Federal Emergency Management Agency (FEMA) collaborate on grant guidance to help public-safety stakeholders use federal funds for interoperable emergency communications. GAO found that OEC's and FEMA's efforts generally align with GAO's leading practices for effective interagency collaboration. For example, OEC's and FEMA's memorandum of agreement and standard operating procedures articulate their agreement in formal documents, define their respective responsibilities, and include relevant participants. During this review, the agencies established a process to monitor and assess grantees' compliance with the grant guidance. However, because the grants for 2018 were not yet awarded at the time of GAO's review, GAO was unable to assess the effectiveness of the new process.

### Hypothetical Example of Emergency Communications Interoperability



Source: GAO. | GAO-19-171

OEC incorporates the First Responder Network Authority's (FirstNet) nationwide public-safety broadband network and other emerging technologies into various offerings such as written guidance, governance planning, and technical assistance. Public-safety organizations GAO interviewed and statewide interoperability coordinators (SWIC) GAO surveyed were generally satisfied with OEC's communication efforts.

OEC has not assessed its methods for communicating with external stakeholders. According to federal internal control standards, management should externally communicate the necessary quality information to achieve the entity's objectives and periodically assess its methods of communication so that the organization has the appropriate tools to communicate quality information on a timely basis. Some SWIC survey respondents and public-safety representatives identified an opportunity for OEC to improve its methods of communication. For example, 26 of the 54 SWICs responded that OEC could use additional tools or approaches, such as social media, for improving communication with its stakeholders. In addition, public-safety officials reported that they have missed training because they were unaware of opportunities. Because OEC has not assessed its methods of communication, OEC may not be using the best tools and approaches to provide timely information on training opportunities, workshops, and other emergency communications information to the public-safety community.

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## Abbreviations

DHS	Department of Homeland Security
ECPC	Emergency Communications Preparedness Center
FEMA	Federal Emergency Management Agency
FirstNet	First Responder Network Authority
LMR	land mobile radio
NCSWIC	National Council of Statewide Interoperability Coordinators
NPPD	National Protection and Programs Directorate
OEC	Office of Emergency Communications
PSAC	Public Safety Advisory Committee
SWIC	statewide interoperability coordinators

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December 12, 2018

The Honorable Ron Johnson  
Chairman  
The Honorable Claire McCaskill  
Ranking Member  
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 Dan Donovan  
Chairman  
The Honorable Donald Payne  
Ranking Member  
Subcommittee on Emergency Preparedness,  
Response, and Communications  
Committee on Homeland Security  
House of Representatives

Public-safety communications systems are used by first responders—such as police officers and firefighters—in thousands of federal, state, and local jurisdictions. It is vital for first responders to have:

- timely communications,
- sufficient capacity to handle the communications, and
- interoperable communications systems that enable first responders to connect with their counterparts in other agencies and jurisdictions, even if their counterparts' systems or equipment vendors differ.

The Office of Emergency Communications (OEC)—located within the Department of Homeland Security's (DHS) National Protection and Programs Directorate (NPPD)—was created in 2007 to promote

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interoperable emergency communications, among other things.<sup>1</sup> OEC offers written guidance, governance planning, and technical assistance to help ensure federal, state, local, tribal, and territorial agencies have the necessary plans, resources, and training they need to support operable and interoperable emergency communications.<sup>2</sup> OEC coordinates with other DHS agencies that have responsibilities for emergency communications, such as the Federal Emergency Management Agency (FEMA), which awarded over \$50 billion in preparedness grants funding to state, local, tribal, and territorial governments from fiscal years 2002 through 2018.<sup>3</sup> According to OEC, its guidance, governance planning, and technical assistance have changed to reflect changes in technology, including the creation of the First Responder Network Authority (FirstNet). FirstNet was created to establish a nationwide, interoperable, wireless broadband network for use by federal, state, tribal, and local public-safety personnel.<sup>4</sup> According to FirstNet, the nationwide network will transform the future of public-safety communications for first responders.

You asked us to obtain information on OEC's and FEMA's grant guidance efforts as well as OEC's plans and offerings for emergency communications. This report examines:

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<sup>1</sup>OEC was created in the Post-Katrina Emergency Management Reform Act, enacted as Title VI of the Department of Homeland Security Appropriations Act, 2007, Pub. L. No. 109-295, 120 Stat. 1355 (2006) codified at 6 U.S.C. § 571. In November 2018, the Cybersecurity and Infrastructure Security Agency Act of 2018 was signed into law. The law reorganized and renamed NPPD and OEC. NPPD has been renamed the Cybersecurity and Infrastructure Security Agency, and OEC has been renamed the Emergency Communications Division. Pub. L. No. 115-278 § 2204, 132 Stat. 4168 (2018). Since the substance of our audit was conducted prior to the reorganization, for this report, we refer to the Cybersecurity and Infrastructure Security Agency as NPPD and the Emergency Communications Division as OEC.

<sup>2</sup>For the purposes of this report, we use the term "offerings" to refer to the training, tools, workshops, guidance documents, and templates that OEC offers to the public-safety community.

<sup>3</sup>GAO, *Homeland Security Grant Program: Additional Actions Could Further Enhance FEMA's Risk-Based Grant Assessment Model*, [GAO-18-354](#) (Washington, D.C.: Sept. 6, 2018).

<sup>4</sup>Middle Class Tax Relief and Job Creation Act of 2012. Pub. L. No. 112-96, §§ 6204-6213, 126 Stat. 156, 208-218 (2012), codified at 47 U.S.C. §§ 1424-1430 established FirstNet as an independent authority within the Department of Commerce to implement a nationwide public-safety network. For additional information on FirstNet's activities, see: GAO, *Public-Safety Broadband Network: FirstNet Has Made Progress Establishing the Network, but Should Address Stakeholder Concerns and Workforce Planning*, [GAO-17-569](#) (Washington, D.C.: June 20, 2017).

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- OEC's and FEMA's collaborative efforts to develop and implement emergency communications grant guidance;
  - how OEC incorporates FirstNet's nationwide public-safety broadband network and other emerging technologies into its plans and offerings, and stakeholders' views regarding those efforts; and
  - the extent to which OEC has assessed its methods of communication.

To address these objectives, we reviewed OEC and FEMA documentation on their collaborative efforts related to grants, including memorandums of agreement and standard operating procedures. We also interviewed OEC and FEMA staff to obtain information on their collaboration efforts. We assessed whether the agencies' actions align with the seven key features of interagency collaboration that we have previously identified.<sup>5</sup> We also reviewed OEC documents and technical assistance offerings, including the 2014 National Emergency Communications Plan.<sup>6</sup> We conducted semi-structured interviews with 6 of the 10 OEC coordinators.<sup>7</sup> We selected these OEC coordinators to achieve variety across geography, population density, tribal presence, and territory representation; their views do not represent OEC's official agency position.<sup>8</sup>

Additionally, we surveyed the statewide interoperability coordinators (SWIC) from 48 states, the District of Columbia, and 5 territories.<sup>9</sup> We surveyed SWICs from May 2018 to July 2018 and received responses from all 54 SWICs.<sup>10</sup> We conducted semi-structured interviews with officials from 10 public-safety organizations that are members of both the

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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).

<sup>6</sup>The National Emergency Communications Plan is a strategic plan to help facilitate information sharing from public-safety officials across various levels of government, jurisdictions, and disciplines to ensure communications during emergencies.

<sup>7</sup>According to DHS, OEC coordinators are subject matter experts who are responsible for engaging stakeholders and enhancing collaboration on emergency communications across all levels of government and the private sector.

<sup>8</sup>We chose these factors because we believe they may impact the types of emergency situations and challenges that public-safety officials encounter, which could affect how coordinators carry out their responsibilities.

<sup>9</sup>At the time of our survey, Maryland and West Virginia did not have assigned SWICs and did not have officials that could respond to our survey.

<sup>10</sup>We did not verify survey responses.



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SAFECOM committee and the Public Safety Advisory Committee (PSAC).<sup>11</sup> We selected organizations that represent various areas of public safety (e.g., law enforcement, public works, and fire and emergency medical services) and different levels of jurisdiction (i.e., federal, state, local, or tribal). We also assessed OEC's efforts for communicating with public-safety stakeholders against pertinent federal standards for internal control.<sup>12</sup> Additional details about our scope and methodology can be found in appendix I, and a copy of our survey results can be found in appendix II.

We conducted this performance audit from December 2017 to December 2018 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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## Background

Effective communication is vital to first responders' ability to respond to emergencies and to ensure their safety. For example, first responders use public-safety communications systems to gather information, coordinate a response, and request additional resources and assistance from neighboring jurisdictions and the federal government. OEC has taken a number of steps aimed at supporting and promoting the ability of public-safety officials to communicate in emergencies and work toward operable and interoperable emergency communications nationwide. OEC develops policy and guidance supporting emergency communications across all levels of government and across various types of emerging technologies such as broadband, Wi-Fi, and NextGen 911, among others. OEC also provides technical assistance—including training, tools, and online and on-site assistance—for federal, state, local, and tribal first responders.<sup>13</sup> First responders use different communications systems,

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<sup>11</sup>SAFECOM and PSAC are federally supported organizations that promote the interoperability of emergency communications.

<sup>12</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

<sup>13</sup>According to OEC, a key aspect of its technical assistance is strategic statewide planning, resulting in Statewide Communications Interoperability Plans, and OEC has collaborated with FEMA to ensure that states have a current plan as a condition of receiving federal grants for communications purposes.

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such as land mobile radio (LMR), commercial wireless services, and FirstNet's network.

- *LMR*: These systems are the primary means for first responders to use voice communications to gather and share information while conducting their daily operations and coordinating their emergency response efforts. LMR systems are intended to provide secure, reliable voice communications in a variety of environments, scenarios, and emergencies.<sup>14</sup> Across the nation, there are thousands of separate LMR systems.
- *Commercial wireless services*: Public-safety entities often pay for commercial wireless services to send data transmissions such as location information, images, and video.<sup>15</sup> Some jurisdictions also use commercial wireless services for voice communications.
- *Nationwide dedicated-broadband network*: Consistent with the law, FirstNet is working to establish a nationwide dedicated network for public-safety use that is intended to foster greater interoperability, support important data transmissions, and meet public-safety officials' reliability needs. In creating FirstNet in 2012, Congress provided it with \$7 billion in federal funds for the network's initial build-out and valuable spectrum for the network to operate on. Unlike current LMR systems, the devices operating on FirstNet's network will use the same radio frequency band nationwide. It is expected that these devices will be interoperable among first responders using the network because the devices will be built using the same open, non-proprietary, commercially available standards.<sup>16</sup>

Communications systems must work together, or be interoperable, even though the systems or equipment vendors may differ. The interoperability

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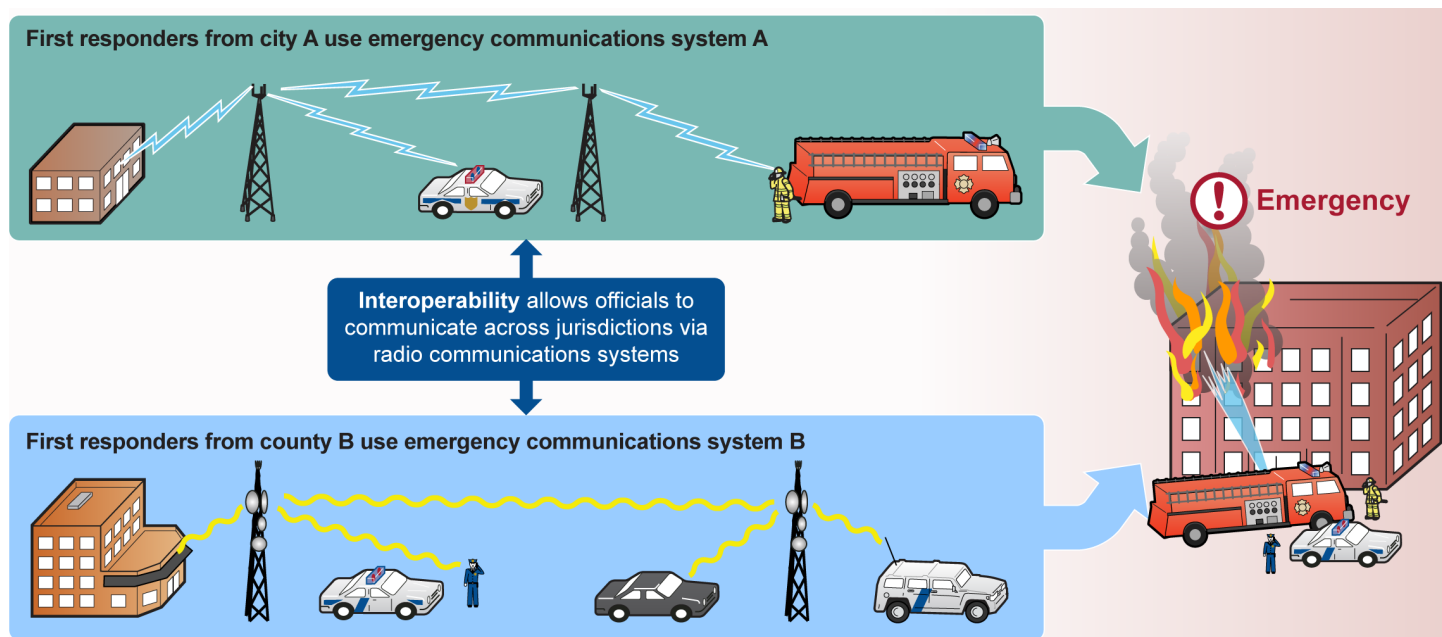
<sup>14</sup>For additional information on LMR, see: GAO, *Emergency Communications: Improved Procurement of Land Mobile Radios Could Enhance Interoperability and Cut Costs*, [GAO-17-12](#), (Washington D.C.: Oct. 5, 2016).

<sup>15</sup>We have previously reported that commercial networks do not always support the reliability and other requirements that public safety officials need. See: GAO, *Public-Safety Broadband Network: FirstNet Should Strengthen Internal Controls and Evaluate Lessons Learned*, [GAO-15-407](#) (Washington, D.C.: Apr. 28, 2015) and GAO, *Emergency Communications: Various Challenges Likely to Slow Implementation of a Public Safety Broadband Network*, [GAO-12-343](#) (Washington, D.C.: Feb. 22, 2012).

<sup>16</sup>For additional information on FirstNet's activities, see: GAO, *Public-Safety Broadband Network: FirstNet Has Made Progress Establishing the Network, but Should Address Stakeholder Concerns and Workforce Planning*, [GAO-17-569](#) (Washington, D.C.: June 20, 2017).

of emergency communications enables first responders and public-safety officials to use their radios and other equipment to communicate with each other across agencies and jurisdictions when needed and as authorized, as shown in figure 1.

Figure 1: Hypothetical Example of Emergency Communications Interoperability



Source: GAO. | GAO-19-171

OEC is tasked with developing and implementing a comprehensive national approach to advance interoperable communications capabilities.<sup>17</sup> For example, according to OEC, it supports and promotes communications used by emergency responders and government officials and leads the nation's operable and interoperable public-safety and national security/emergency preparedness communications efforts. OEC notes that it plays a key role in ensuring federal, state, local, tribal, and territorial agencies have the necessary plans, resources, and training needed to support operable and interoperable emergency communications. To help in this effort, OEC instituted a coordination program that established regional coordinators across the nation. According to OEC, its coordinators work to build trusted relationships,

<sup>17</sup>DHS, *National Emergency Communications Plan* (Washington, D.C.: 2014).

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enhance collaboration, and stimulate the sharing of best practices and information between all levels of government, critical infrastructure owners and operators, and key non-government organizations.

OEC developed the *National Emergency Communications Plan* in 2008 and worked with federal, state, local, and tribal jurisdictions to update it in 2014 to reflect an evolving communications environment. The long-term vision of the plan—which OEC views as the nation’s current strategic plan for emergency communications—is to enable the nation’s emergency-response community to communicate and share information across all levels of government, jurisdictions, disciplines, and organizations for all threats and hazards, as needed and when authorized.

To help it accomplish this mission, OEC works with three emergency communications advisory groups: SAFECOM, the Emergency Communications Preparedness Center (ECPC), and the National Council of Statewide Interoperability Coordinators (NCSWIC).<sup>18</sup> These organizations promote the interoperability of emergency communications systems by focusing on technologies including, but not limited to, LMR and satellite technology.

- SAFECOM: According to the 2018 SAFECOM Strategic Plan, SAFECOM develops products and completes a range of activities each year in support of its vision and mission, including providing a national view of public-safety priorities and challenges, developing resources and tools aligned to the *2014 National Emergency Communications Plan*, and collaborating with partner organizations to promote the interoperability of emergency communications. One of the products developed by SAFECOM each year is the *Guidance on Emergency Communications Grants*.<sup>19</sup> SAFECOM consists of more than 50 members that represent local, tribal, and state governments; federal agencies; state emergency responders; and intergovernmental and national public-safety organizations.

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<sup>18</sup>SAFECOM was formed in 2001 as part of the Presidential E-Government Initiative to improve public-safety interoperability. ECPC was established in 2006 by the Post-Katrina Emergency Management Reform Act. NCSWIC was established by OEC in July 2010.

<sup>19</sup>Department of Homeland Security, Office of Emergency Communications, *Fiscal Year 2018 SAFECOM Guidance on Emergency Communications Grants*. The guidance provides grantees with current information on emergency communications policies, eligible costs, best practices, and technical standards for state, local, tribal, and territorial grantees using federal funds for emergency communications projects.

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- ECPC: The ECPC is an interagency collaborative group that provides a venue for coordinating federal emergency-communications efforts. The ECPC works to improve coordination and information sharing among federal emergency-communications programs. The ECPC 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. The ECPC has 14 member agencies that are responsible for setting its priorities.<sup>20</sup>
  - NCSWIC: This council consists of SWICs and their alternates from 50 states, 5 territories, and the District of Columbia. According to SAFECOM, NCSWIC develops products and services to assist the SWICs with leveraging their relationships, professional knowledge, and experience with public-safety partners involved in interoperable communications at all levels of government.

Additionally, in 2013, FirstNet established the PSAC to provide advice to FirstNet. The committee is composed of members who represent local, tribal, and state public-safety organizations; federal agencies; and national public-safety organizations.

FEMA is responsible for coordinating government-wide disaster response efforts, including on-the-ground emergency communications support and some technical assistance. For example, FEMA's regional emergency-communications coordinator is responsible for providing emergency communications assistance on an as-needed basis and coordinating FEMA's tactical communications support during a disaster or emergency. FEMA also provides a range of grant assistance to state, local, tribal, and territorial entities, including preparedness grants that can be used for emergency communications.

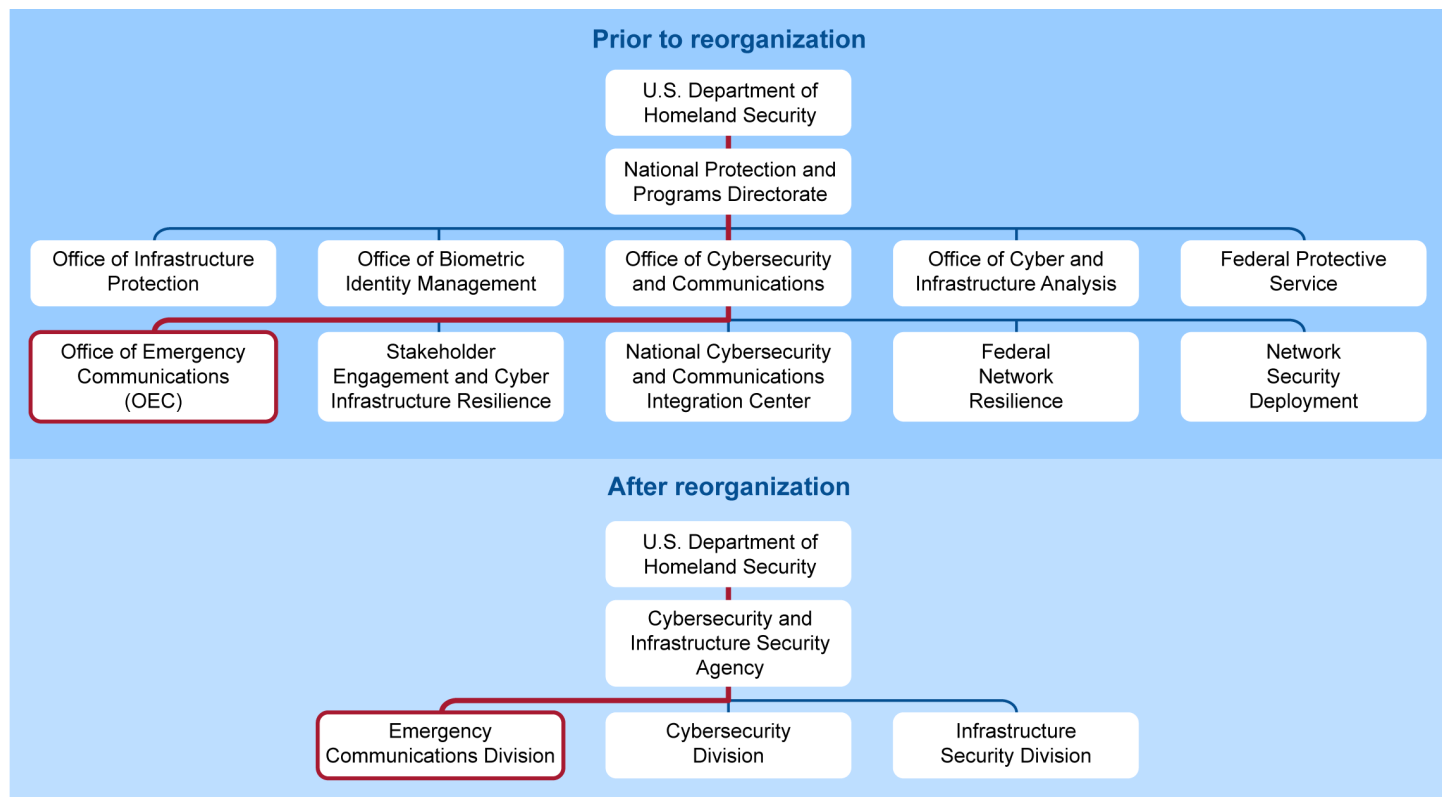
As noted above, in November 2018, legislation was signed into law that reorganized and renamed NPPD and OEC. Previously, OEC was one of five divisions under the Office of Cyber Security and Communications which in turn was one of five divisions within NPPD. However, NPPD has been renamed the Cybersecurity and Infrastructure Security Agency, and

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<sup>20</sup>The ECPC includes the following departments: Agriculture, Commerce, Defense, Energy, Health and Human Services, Homeland Security, Interior, Justice, Labor, State, Transportation, and the Treasury; as well as two agencies: the Federal Communications Commission and the General Services Administration.

OEC was renamed the Emergency Communications Division and was elevated to one of three direct reporting divisions within the new agency.<sup>21</sup> See figure 2 for an illustration of changes made to OEC's organizational placement.

**Figure 2: Legislative Reorganization of the Office of Emergency Communications within the Department of Homeland Security**



Sources: GAO analysis of Department of Homeland Security information and public law. | GAO-19-171

<sup>21</sup> Pub. L. No. 115-278 § 2204, 132 Stat. 4168 (2018). Since the substance of our audit was conducted prior to the reorganization, for this report, we refer to the Cybersecurity and Infrastructure Security Agency as NPPD and the Emergency Communications Division as OEC.

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## OEC's and FEMA's Joint Efforts for Emergency Communications Grants Generally Follow Key Features for Effective Interagency Collaboration

OEC and FEMA have responsibilities for developing and implementing grant guidance for grantees using federal funds for interoperable emergency communications. Specifically, OEC and FEMA officials told us FEMA is responsible for administering the grants, and OEC coordinates emergency communications grant guidance annually through SAFECOM's *Guidance on Emergency Communications Grants*. We reviewed OEC's and FEMA's collaborative efforts related to grant guidance and found that their efforts generally follow our previously identified leading practices for effective interagency collaboration, as described below.<sup>22</sup>

- **Written Guidance and Agreements.** Agencies that formally document their agreements can strengthen their commitment to working collaboratively.<sup>23</sup> OEC and FEMA formalized their coordination efforts for interoperable emergency communications grants in a memorandum of agreement in 2014. This memorandum assigned OEC and FEMA responsibilities and established a joint working group to develop standard operating procedures, which OEC said were drafted the following year but not formally approved by FEMA, that govern coordination between the agencies. We also reported that written agreements are most effective when the collaborators regularly monitor and update them.<sup>24</sup> When we started our review, OEC and FEMA officials told us that they had not updated the memorandum of agreement, which included the draft standard operating procedures as an appendix. However, the agencies approved an updated memorandum of agreement and standard operating procedures, and OEC provided them to us in July 2018.
- **Leadership.** When buy-in is required from multiple agencies, involving leadership from each can convey the agencies' support for the collaborative effort.<sup>25</sup> According to OEC and FEMA officials, their grants coordination efforts include high-level leadership. Specifically, senior leaders from both agencies signed the 2014 and 2018

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<sup>22</sup>GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: Sept. 27, 2012).

<sup>23</sup>[GAO-12-1022](#).

<sup>24</sup>GAO, *Rural Economic Development: Collaboration between SBA and USDA Could Be Improved*, [GAO-08-1123](#) (Washington, D.C.: Sept. 18, 2008).

<sup>25</sup>[GAO-12-1022](#).

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memorandums of agreement. Also, OEC officials told us that their leaders in the grants program office are responsible for overseeing the collaborative effort.

- **Bridging Organizational Culture.** Collaborating agencies should establish ways to operate across agency boundaries and address their different organizational cultures.<sup>26</sup> OEC and FEMA operate across agency boundaries in several ways. First, both agencies told us that they participate in the ECPC Grants Focus Group, whose members coordinate across federal grant programs to support interoperable emergency communications. The group reviews SAFECOM guidance and, according to FEMA officials, meets on a quarterly basis. Second, OEC officials said the agencies foster open lines of direct communication via conference calls, e-mail correspondence, and in-person meetings. OEC and FEMA officials told us their communications include sharing and reviewing language in FEMA's notices that announce grant opportunities and OEC's SAFECOM guidance. Third, the agencies said that OEC officials conduct emergency-communications-related trainings and briefings for FEMA at least once a year. According to OEC officials, these trainings have included a discussion on the movement toward broadband and FirstNet. Finally, FEMA officials told us that their program analysts have attended conferences with OEC to speak to the SWICs about grant programs. They said the program analysts explained how the grant money can be leveraged to support projects within the individual states and answered questions about the grants. OEC officials said having FEMA attend conferences to discuss specific grant information is useful for public-safety stakeholders.
- **Clarity of Roles and Responsibilities.** Collaborating agencies can get clarity when they define and agree upon their respective roles and responsibilities.<sup>27</sup> As part of the 2014 and 2018 memorandums of agreement, OEC and FEMA established clear responsibilities for how each agency will support the grants coordination effort. For example, both offices were responsible for assigning experienced program staff and contributing to the development of standard operating procedures by attending meetings and conducting research. Also, the standard operating procedures clarify how OEC and FEMA will share information, solicit input on grants guidance language, and review grant applications.

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

<sup>27</sup>[GAO-12-1022](#).



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- **Participants.** Including relevant participants helps ensure individuals with the necessary knowledge, skills, and abilities will contribute to the collaborative effort.<sup>28</sup> OEC and FEMA identify points of contact in their memorandums of agreement. According to OEC officials, they did not always work with the correct FEMA staff before the 2014 memorandum was developed. Also, FEMA officials told us that their grants program staff who participate in the coordination effort with OEC perform those specific responsibilities as a collateral duty on an as needed basis. According to OEC officials, OEC's performance plans outline coordination with FEMA and areas related to the agencies' memorandum of agreement for the staff who handle grant issues. OEC and FEMA officials said participants' responsibilities include serving as technical subject matter experts and reviewing language for grants guidance and notices of funding opportunities.
  - **Resources.** Collaborating agencies should identify the human, financial, and technological resources they need to initiate or sustain their efforts.<sup>29</sup> OEC and FEMA staff their collaborative effort with employees from their grants offices to address their human resource needs. These employees perform work related to emergency communications grants as outlined in their performance plans or as a collateral duty. The agencies also provide OEC access to FEMA's non-disaster grants system to share grantee information. According to OEC and FEMA officials, their collaboration efforts do not require either agency to obligate funds or use special technology, such as online information-sharing tools.
  - **Outcomes and Accountability.** Collaborating agencies that create a means to monitor and evaluate their efforts can better identify areas for improvement.<sup>30</sup> According to OEC and FEMA documentation, the primary goal of the draft standard operating procedures was to prevent grantees from improperly using federal funds, such as purchasing equipment that is not interoperable. OEC officials said the biggest gap in those standard operating procedures was that they did not include a monitoring program to ensure grantees were compliant with grant guidance, which include requirements for interoperability. OEC's and FEMA's July 2018 standard operating procedures established a process to track and monitor grantee compliance. They

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<sup>28</sup>[GAO-12-1022](#).

<sup>29</sup>[GAO-12-1022](#).

<sup>30</sup>[GAO-12-1022](#).

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also identified a process for assessing the information they collect and how it will be shared among OEC and FEMA, and when appropriate, other stakeholders. At the time of our review, OEC and FEMA officials told us they had not implemented the monitoring procedures because the grants for the 2018 grant cycle were not yet awarded. Accordingly, we could not evaluate the effectiveness of the new procedures to monitor and assess grantee compliance, and without conducting such an evaluation, we could not determine whether OEC's and FEMA's efforts align with the key practice in this area. Senior officials from both agencies said the monitoring procedures would be updated if they do not work as intended.

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## OEC Incorporates FirstNet's Network and Emerging Technologies into Its Plans and Offerings

After being established in 2007, OEC initially focused on enhancing the interoperability and continuity of LMR systems. However, according to OEC officials, its programs, products, and services have adapted and evolved to incorporate new modes of communications and technologies. Additionally, OEC's technical assistance offerings for emergency communications technology have evolved over time as new technologies have come into use.<sup>31</sup> For example, OEC's technical assistance catalog contains new or enhanced offerings on topics related to broadband issues such as FirstNet's network, Next Generation 911, alerts and warnings, and incident management.<sup>32</sup>

In 2014, DHS released its second *National Emergency Communications Plan*, which identified the need to focus on broadband technologies, including FirstNet's nationwide public-safety broadband network. One of the plan's top priorities is "ensuring emergency responders and government officials plan and prepare for the adoption, integration, and use of broadband technologies, including the planning and deployment of

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<sup>31</sup>OEC's technical assistance offerings are available to SWICs and other stakeholders, and are described in OEC's annual *Technical Assistance/Statewide Communications Interoperability Plan Guide*.

<sup>32</sup>Next Generation 911 uses Internet protocol-based technology to deliver and process voice calls and data. Under these systems, 911 call centers will be able to accommodate emergency communications from the range of technologies in use today. For additional information on Next Generation 911, see: GAO, *Next Generation 911: National 911 Program Could Strengthen Efforts to Assist States*, [GAO-18-252](#) (Washington, D.C.: Jan. 31, 2018). The National Incident Management System is a comprehensive, national approach to incident management and provides a framework to enable all levels of government and the private sector to work together to prepare for, prevent, respond to, and recover from incidents.

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the nationwide public-safety broadband network.”<sup>33</sup> To meet this priority, OEC officials told us that they provide stakeholders with a wide range of products and services to help prepare for the adoption, integration, and use of broadband. For instance, officials said that they leverage OEC’s governance groups—SAFECOM, NCSWIC, and ECPC—to develop products and services and to identify specific challenges and requirements regarding broadband. Additionally, OEC officials told us that they coordinate regularly with FirstNet staff and invite FirstNet to meet and brief the stakeholder community on the latest deployment information. However, OEC officials told us that FirstNet’s network is one option available to public-safety and government officials to access broadband communications and information sharing and explained that OEC maintains a neutral position for all technologies and vendors. Accordingly, OEC is not responsible for promoting any vendor solutions, including FirstNet’s network, and there is no requirement for OEC to do so. Additionally, five of six OEC coordinators we interviewed told us that FirstNet’s network is only one of several emergency-communications technology options and that OEC should continue to provide information to public-safety stakeholders regarding other providers. For example, there are commercial carriers that provide wireless broadband services, and we have previously reported that these commercial carriers could choose to compete with FirstNet.<sup>34</sup>

According to OEC officials, prior to the start of each fiscal year, OEC engages with stakeholders to gather feedback on new or revised technical assistance offerings, as well as updates to existing plans and documents. OEC officials told us that they expect an increase in technical assistance requests that focus on issues related to mobile data use, broadband governance, standard operating procedures, and policies and procedures. According to OEC officials, OEC has delivered more than 2,000 technical-assistance-training courses and workshops since 2007, and OEC will continually update its technical assistance offerings to incorporate new modes of communications and technologies into training, exercises, and standard operating procedures for its stakeholders.

The majority (7 of 10) of public-safety organizations that we interviewed told us that OEC sufficiently incorporates information regarding FirstNet’s

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<sup>33</sup>Department of Homeland Security, Office of Emergency Communications, *National Emergency Communications Plan* (Washington, D.C.: 2014).

<sup>34</sup>[GAO-17-569](#).

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network into its guidance and offerings. For example, officials from 6 of 10 organizations that we interviewed told us that OEC must strike a balance between FirstNet's network and other emerging technologies, and that OEC has successfully accomplished this task. Additionally, the majority of SWICs responded to our survey that it is at least moderately important for OEC to incorporate the FirstNet network and emerging technologies into its written guidance, technical assistance offerings, training opportunities, workshops, and grant guidance. Furthermore, in most cases, SWICs responded that OEC has incorporated FirstNet's network and emerging technologies into these areas, as follows:

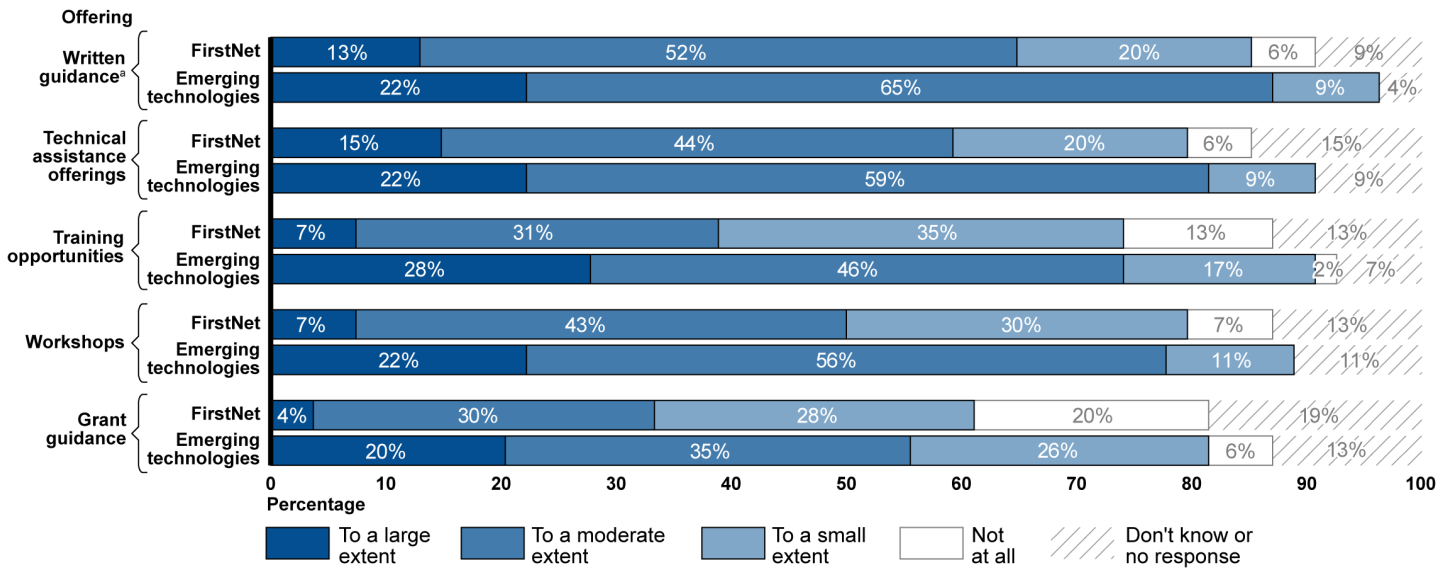
- **FirstNet network.** In our survey, the majority of SWICs responded that OEC has incorporated, to a large or moderate extent, FirstNet's network into its written guidance (65 percent) and technical assistance offerings (59 percent), and half of SWICs said the same for OEC's workshops. However, fewer SWICs reported that OEC incorporated FirstNet's network, to a large or moderate extent, into its training opportunities (39 percent) and grant guidance (33 percent).
- **Emerging technologies.** The majority of SWICs reported that OEC has incorporated, to a large or moderate extent, emerging technologies into its written guidance (87 percent); technical assistance offerings (81 percent); training opportunities (74 percent); workshops (78 percent); and grant guidance (56 percent).

See figure 3 for complete survey data regarding SWICs' views on the extent that OEC has incorporated FirstNet's network and emerging technologies into its offerings.<sup>35</sup>

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<sup>35</sup>For complete survey wording and results, see appendix II.

**Figure 3: Statewide Interoperability Coordinators' Views on the Extent the Office of Emergency Communications has Incorporated FirstNet's Network and Emerging Technologies into Its Offerings**



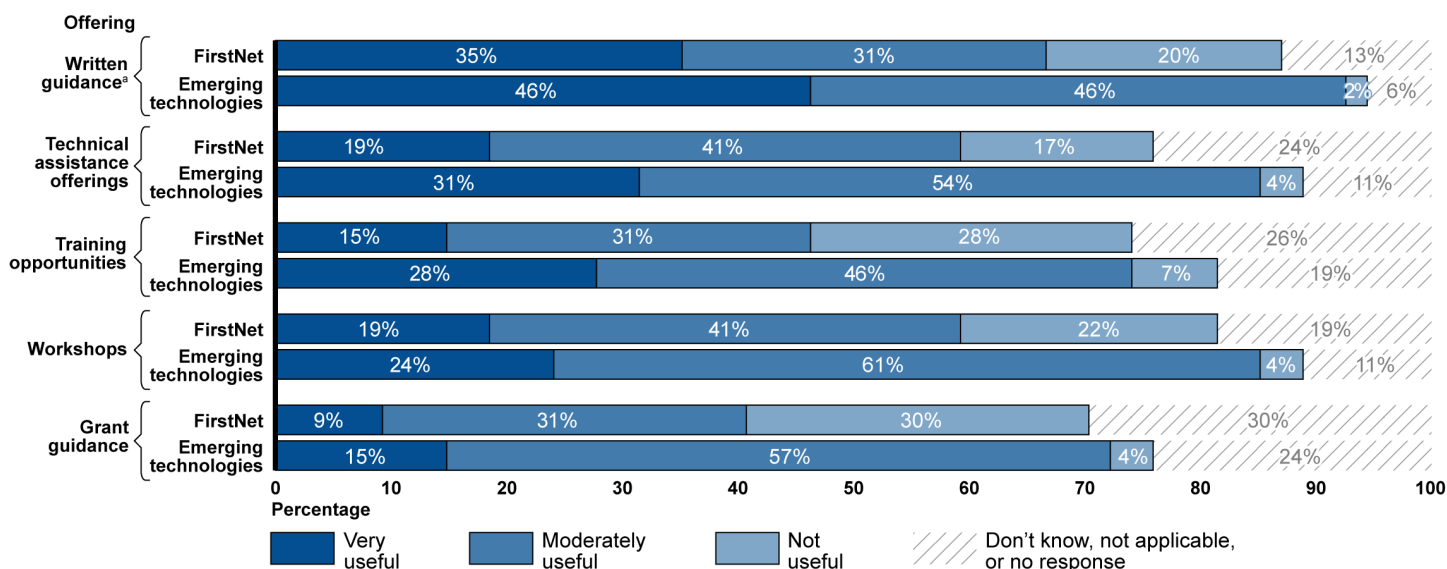
Source: GAO survey results. | GAO-19-171

In surveying SWICs on the usefulness of OEC's efforts to incorporate FirstNet's network and emerging technologies into its offerings, we found the following:

- FirstNet network.** The majority of SWICs reported that OEC's efforts to incorporate FirstNet's network into its written guidance (67 percent), technical assistance offerings (59 percent), and workshops (59 percent) have been very or moderately useful. However, less than a majority of SWICs reported that OEC's efforts to incorporate FirstNet's network into its training opportunities (46 percent) and grant guidance (40 percent) have been very or moderately useful.
- Emerging technologies.** The majority of SWICs reported that OEC's efforts to incorporate emerging technologies into its written guidance (93 percent), technical assistance offerings (85 percent), training opportunities (74 percent), workshops (85 percent), and grant guidance (72 percent) have been very or moderately useful.

See figure 4 for complete survey data regarding SWICs' views on the usefulness of OEC's efforts to incorporate FirstNet's network and emerging technologies into its offerings.<sup>36</sup>

**Figure 4: Statewide Interoperability Coordinators' Views on the Usefulness of the Office of Emergency Communications' Efforts to Incorporate FirstNet's Network and Emerging Technologies into Its Offerings**



Source: GAO survey results. | GAO-19-171

Even following the implementation of FirstNet, public-safety stakeholders told us they expect OEC will play an important role in ensuring interoperable emergency communications, both regarding the FirstNet network and other technologies. For example, 45 of 54 (83 percent) of SWICs we surveyed reported that OEC will likely have a large or moderate role for ensuring interoperable emergency communications once FirstNet's network is fully operational. Additionally, nearly all (9 of 10) of public-safety organizations we interviewed said that they believe OEC will continue to play an important role in ensuring interoperable emergency communications after the implementation of FirstNet's network.

<sup>36</sup>For complete survey wording and results, see appendix II.

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## OEC Has Not Assessed Its Methods for Communicating with External Stakeholders

OEC is required to conduct extensive nationwide outreach to support and promote interoperable emergency-communications capabilities by state, regional, local, and tribal governments and public-safety agencies in the event of natural disasters and acts of terrorism and other man-made disasters.<sup>37</sup> According to federal standards for internal control, management should externally communicate the necessary quality information to achieve the entity's objectives. This includes communicating with external parties and using the appropriate methods of communication. The federal standards state that management should periodically assess the entity's methods of communication so that the organization has the appropriate tools to communicate quality information throughout and outside of the entity on a timely basis.<sup>38</sup>

Most public-safety organizations we interviewed told us that OEC communicates with their organization frequently through committee meetings and other means. For example, 9 of the 10 organizations told us that a key form of communication between their organization and OEC is participation in emergency-communications advisory groups such as SAFECOM, NCSWIC, and PSAC.<sup>39</sup> Furthermore, OEC officials reported that OEC's guidance documents, plans, tools, and technical assistance offerings are formally provided to the public-safety community through the SAFECOM, NCSWIC, and ECPC distribution lists. Governing body representatives then distribute the information to their organizations and stakeholders. These documents are also available on DHS's website. Furthermore, 4 of the 10 organizations told us that they regularly have direct communications with OEC staff. The large majority of SWICs responded that they are very or moderately satisfied with the communication efforts from both OEC headquarters (81 percent) and OEC coordinators (93 percent).

However, some stakeholders identified communication challenges as well as opportunities for OEC to improve communication. For example,

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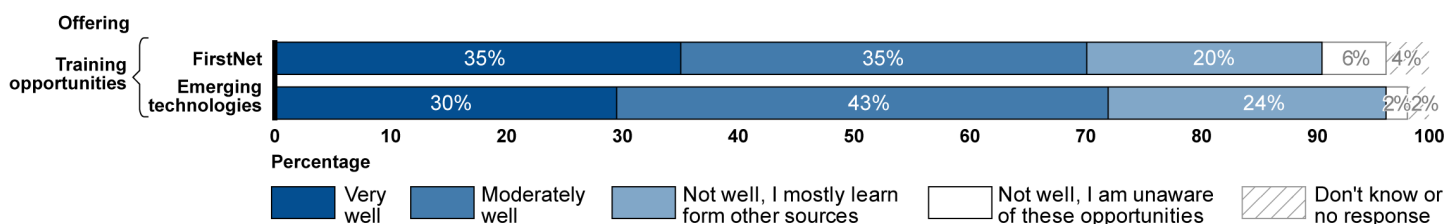
<sup>37</sup>6 U.S.C. § 571(c)(4)-(5).

<sup>38</sup>[GAO-14-704G](#).

<sup>39</sup>The Middle Class Tax Relief and Job Creation Act of 2012 required FirstNet to establish a standing Public Safety Advisory Committee to offer FirstNet guidance and subject matter expertise and conduct outreach to the Public Safety Advisory committee's membership—primarily comprising associations that represent different levels of government and public safety disciplines—on FirstNet's network development. 47 U.S.C. § 1425.

approximately one quarter (26 percent) of SWICs said that OEC does not communicate training well, and these SWICs reported that they are either unaware of OEC training opportunities related to FirstNet’s network and other emerging technologies, or that they mostly learn about OEC training opportunities from other sources. See figure 5 below for additional survey information regarding SWICs’ views on how well OEC communicates training opportunities related to FirstNet’s network and other emerging technologies.<sup>40</sup>

**Figure 5: Statewide Interoperability Coordinators’ Views on How Well the Office of Emergency Communications Communicates Training Opportunities Related to FirstNet’s Network and Other Emerging Technologies**



Source: GAO survey results. | GAO-19-171

Also with respect to OEC’s communication efforts with stakeholders, four of six OEC coordinators and 3 of 10 public-safety organizations we interviewed, along with 26 of 54 (48 percent) of the SWICs we surveyed, identified the need for OEC to use additional tools or approaches for improving communication with SWICs and the public-safety community. For example, one coordinator said that there are public-safety stakeholders who are unaware of OEC. Similarly, representatives from a public-safety organization we interviewed told us that OEC should help public-safety stakeholders better understand what OEC does. Both the OEC coordinator and public-safety stakeholders in these examples identified the need for OEC to use social media to improve public-safety stakeholders’ understanding of OEC and its offerings. Additionally, an OEC coordinator told us that each region is different, and unless there is an OEC coordinator who is proactive about communicating information to the public-safety community, then important information does not get out to the appropriate people. The coordinator also said that it is difficult to communicate information to all of the needed stakeholders because he is solely responsible for communicating with many public-safety entities and jurisdictions within multiple states. Furthermore, a SWIC reported that

<sup>40</sup>For complete survey wording and results, see appendix II.



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other organizations use social media for communicating during disasters and for notifying interested parties about events and trainings, and that OEC should do the same. OEC officials told us that NPPD recently established a Twitter account that OEC has used to increase awareness of programs, products, and services. However, since the establishment of the account in February 2018 through September 2018, only 23 of NPPD's 280 tweets and retweets (8.2 percent) made mention of OEC, 15 of which occurred in March 2018.

In addition to social media, some public-safety organizations and SWICs identified additional tools or approaches that OEC could use to improve communication with the public-safety community. These tools and approaches include designating an intergovernmental specialist or liaison within OEC to coordinate with public-safety stakeholders, developing additional regional-focused meetings such as conferences and workshops, and creating online or distance-learning opportunities (e.g., online training, webinars, online chat or bulletin board services, etc.).

Although OEC officials told us that they employ mechanisms to understand the effectiveness of OEC's programs, products, and services, we found OEC has not specifically assessed its methods of communication. For example, OEC analyzes feedback forms provided at meetings and stakeholder engagements, gathers direct input from stakeholders through in-person and phone discussions and e-mail, tracks the open rate of e-mails and website and blog post traffic, and reviews social media analytics for specific event campaigns. At the time of our review, OEC officials told us that they were developing a formal performance-management program to measure the impact of OEC's programs on the public-safety and national security/emergency preparedness communities. However, these broad efforts aimed at reviewing the overall programs are not designed for the specific purpose of assessing OEC's methods of communication, and OEC does not have any plans in place for doing so.

Lacking an assessment of its methods of communication, OEC may be missing opportunities to learn which tools and approaches are the most effective and to use those to deliver timely information to public-safety stakeholders. As noted above, this can result in public-safety officials missing trainings or not receiving other helpful information. Furthermore, not using additional methods of communication or tools could contribute to uncertainty among the public-safety community about OEC's mission and its efforts to improve the interoperability of emergency communications.

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## Conclusions

OEC has multiple efforts supporting interoperable emergency communications that the public-safety community relies on to better respond to emergency situations. Although public-safety stakeholders we contacted were generally satisfied with OEC's communications efforts, OEC could be missing opportunities to use additional tools and approaches, such as social media, to improve communication with public-safety officials. Absent an assessment of its methods of communication, OEC cannot ensure it is using the best methods to provide relevant and timely information on training opportunities, workshops, technical assistance offerings, and other emergency-communications information to the public-safety community.

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## Recommendation for Executive Action

OEC should assess its methods of communication to help ensure it has the appropriate tools and approaches to communicate quality information to public-safety stakeholders, and as appropriate, make adjustments to its communications strategy. (Recommendation 1)

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## Agency Comments

We provided a draft of this report to DHS for review and comment. In response, DHS provided written comments, which are reprinted in appendix III. DHS concurred with our recommendation and provided an attachment describing the actions it would take to implement the recommendation.

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We are sending copies of this report to the appropriate congressional committees, the Secretary of Homeland Security, and other interested parties. In addition, the report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or 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. GAO staff who made key contributions to this report are listed in appendix IV.

A handwritten signature in black ink, appearing to read 'M. Goldstein', with a long horizontal flourish extending to the right.

Mark L. Goldstein  
Director, Physical Infrastructure

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# Appendix I: Objectives, Scope, and Methodology

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This report examines (1) the Office of Emergency Communications' (OEC) and the Federal Emergency Management Agency's (FEMA) collaborative efforts to develop and implement guidance for grantees using federal grants for interoperable emergency communications; (2) how OEC incorporates FirstNet's nationwide public-safety broadband network and other emerging technologies into its plans and offerings, and stakeholders' views regarding those efforts; and (3) the extent to which OEC has assessed its methods of communication.

To evaluate OEC's and FEMA's collaborative efforts to develop and implement grant guidance, we collected and reviewed documentation relevant to the collaborative effort, including memorandums of agreements, standard operating procedures, and meeting agendas. We assessed OEC's and FEMA's actions against the seven key considerations for interagency collaborations. We also interviewed OEC and FEMA Grant Programs Directorate officials who have responsibilities for Department of Homeland Security (DHS) grants. We asked them to discuss their approach to interagency collaboration, including the process to jointly develop grant guidance language. We asked agency officials questions that were based on the key considerations for implementing interagency collaborative mechanisms that we identified in a prior report.<sup>1</sup>

To determine how OEC has incorporated FirstNet's network and other emerging technologies into its plans and offerings, we reviewed relevant OEC documentation, including fact sheets and technical assistance guides. We also reviewed the 2014 *National Emergency Communications Plan* (NECP) and OEC's March 2017 biennial report to Congress on the progress toward meeting NECP goals.<sup>2</sup> We interviewed OEC headquarters officials about the agency's efforts to date, including how OEC develops its offerings and workshops and communicates this information to the public-safety community. We also interviewed 6 of 10 OEC coordinators using a semi-structured interview format to get on-the-ground perspectives from OEC staff who serve as points of contact for

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<sup>1</sup>GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012). Key considerations fall into the following categories: written guidance and agreements, leadership, building organizational culture, clarity of roles and responsibilities, participants, resources, and outcomes and accountability.

<sup>2</sup>The 2014 NECP, which is an update to the original 2008 edition, established five strategic goals: governance and leadership, planning and procedures, training and exercises, operational coordination, and research and development.

public-safety stakeholders.<sup>3</sup> We selected OEC coordinators to achieve variety across geography, population density, tribal presence, and territory representation.<sup>4</sup> We interviewed OEC coordinators to obtain their perspectives as subject matter experts, but their views should not be attributed to OEC's official agency position.

In addition, to obtain stakeholders' views on OEC's efforts to incorporate FirstNet's network and other emerging technologies into plans and offerings, we surveyed all 54 statewide interoperability coordinators (SWIC) from 48 states, five territories, and the District of Columbia.<sup>5</sup> We obtained a list of SWICs from DHS and confirmed additional contact information via e-mail. We conducted a web-based survey to learn SWICs' perspectives on issues including the importance of incorporating FirstNet's network and other emerging technologies into OEC's plans and offerings, OEC's communication with the public-safety community, and SWICs' level of satisfaction with OEC's efforts. To ensure the survey questions were clear and accurately addressed the relevant terms and concepts, we pretested the survey with SWICs from three states: Illinois, Massachusetts, and Texas. These SWICs were selected to get perspectives from officials who have served in the role for at least several years and SWICs who are new to the position. We administered our survey from May 2018 to July 2018 and received 54 responses for a 100 percent response rate.

We also used a semi-structured interview format to obtain views from representatives from 10 public-safety organizations who have expertise in public-safety and federal emergency-communications efforts (see table 1). To identify relevant organizations, we reviewed our prior report that identified 34 organizations that are members of both OEC's SAFECOM advisory group and FirstNet's Public Safety Advisory Committee (PSAC).<sup>6</sup> We researched the members to help determine the extent to which each

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<sup>3</sup>We attempted to interview a seventh coordinator but we did not receive a response.

<sup>4</sup>We chose these factors because we believe they may impact the types of emergency situations and challenges public-safety officials encounter, which could affect how OEC coordinators carry out their responsibilities.

<sup>5</sup>At the time of our survey, Maryland and West Virginia did not have assigned SWICs and did not have officials who could respond to our survey.

<sup>6</sup>GAO, *Emergency Communications: Overlap and Views on the Effectiveness of Organizations Promoting the Interoperability of Equipment*, [GAO-18-173R](#) (Washington, D.C.: Oct. 30, 2017).

organization is involved in issues related to our review. We selected 10 public-safety organizations to interview on the basis of: (1) this research, (2) information from DHS, and (3) a literature review. Because one association declined our request for an interview, we contacted and interviewed another relevant organization from the original list of 34 member organizations. The views shared by the representatives we interviewed are not generalizable to all public-safety organizations that interact with OEC; however, we were able to secure the participation of organizations that focus on various public-safety issues across federal, state, local, and tribal jurisdictions and thus believe their views provide a balanced and informed perspective on the topics discussed.

**Table 1: Public-Safety Organizations Interviewed**

Organization	Representation
American Public Works Association	Represents federal, state, and local professionals in all aspects of public works.
InterAgency Board	Represents operational, technical, and support organizations to improve national preparedness and promote interoperability and compatibility among local, state, and federal response communities.
International Association of Chiefs of Police	Represents law enforcement professionals of all ranks, as well as non-sworn leaders across the criminal justice system.
International Association of Fire Chiefs	Represents leadership of firefighters and emergency responders worldwide.
National Association of Counties	Represents counties' elected officials and employees.
National Association of Regional Councils	Represents local elected officials and professionals.
National Association of Telecommunications Officers and Advisors	Represents local officials and agencies located in cities, towns, counties and commissions across the country.
National Congress of American Indians	Represents tribal governments and communities.
National Emergency Management Association	Represents emergency management directors from states, territories, and the District of Columbia.
National Governors Association	Represents the governors of states, territories, and commonwealths.

Source: GAO and organization information. | GAO-19-171

To evaluate the extent that OEC has assessed its methods of communication, we reviewed OEC's documentation for collecting stakeholders' feedback. We also reviewed the interview responses from OEC officials and the public-safety organizations listed in table 1 and the SWIC survey data pertaining to OEC's communications efforts. We assessed OEC's efforts against federal standards for internal control

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regarding external communications and periodic evaluation of its methods of communication.<sup>7</sup>

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<sup>7</sup>GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

# Appendix II: Survey of Statewide Interoperability Coordinators

The questions we asked in our survey of statewide interoperability coordinators (SWIC) 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 surveyed all SWICs from 48 states, five territories, and the District of Columbia.<sup>1</sup> We administered our survey from May 2018 to July 2018 and received 54 responses for a 100 percent response rate. Due to rounding, the aggregated results for each closed-ended question may not add up to exactly 100 percent. For a more detailed discussion of our survey methodology see appendix I.

## Governance

### 1. What best describes the Statewide Interoperability Coordinator (SWIC) in your state?

Response	Number of responses	Percentage
Full-time: SWIC responsibilities only	8	15%
Full-time: SWIC and other responsibilities	32	59%
Other	14	26%
Don't know	0	0%
No answer/not checked	0	0%

1a. If you selected "Other," please explain.

(Written responses not included)

### 2. Does the SWIC also serve in the role of the FirstNet State Point of Contact (SPOC)?

Response	Number of responses	Percentage
Yes	20	37%
No	34	63%
Don't know	0	0%
No answer/not checked	0	0%

<sup>1</sup>At the time of our survey, Maryland and West Virginia had vacant SWIC positions and did not have alternative officials who could respond to our survey.



**2a. If no, how often does the SWIC coordinate with the SPOC on FirstNet’s nationwide public safety broadband network?**

Response	Number of responses	Percentage
Always or often	25	46%
Sometimes	7	13%
Rarely or never	1	2%
Don’t know	0	0%
No answer/not checked	21	39%

2b. If you selected “rarely or never,” please explain.

(Written responses not included)

**OEC Coordination Support - FirstNet’s Nationwide Public Safety Broadband Network**

The questions in this section ask your opinion about OEC’s efforts to help the public safety community improve interoperable emergency communications capabilities. This section will be about FirstNet’s nationwide public safety broadband network.

**3. In your opinion, how important is it for OEC to incorporate FirstNet’s nationwide public safety broadband network into the following areas?**

	Response	Number of responses	Percentage
Written guidance (i.e., plans, policies, procedures, governance structure, etc.)	Very important	39	72%
	Moderately important	14	26%
	Not important	1	2%
	Don’t know	0	0%
	Not applicable	0	0%
	No answer/not checked	0	0%
Technical assistance offerings	Very important	31	57%
	Moderately important	18	33%
	Not important	4	7%
	Don’t know	1	2%
	Not applicable	0	0%

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

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Training opportunities	No answer/not checked	0	0%
	Very important	31	57%
	Moderately important	15	28%
	Not important	7	13%
	Don't know	1	2%
	Not applicable	0	0%
	No answer/not checked	0	0%
Workshops	Very important	31	57%
	Moderately important	18	33%
	Not important	4	7%
	Don't know	1	2%
	Not applicable	0	0%
	No answer/not checked	0	0%
Grant guidance	Very important	30	56%
	Moderately important	17	31%
	Not important	6	11%
	Don't know	1	2%
	Not applicable	0	0%
	No answer/not checked	0	0%
Other area	Very important	6	11%
	Moderately important	2	4%
	Not important	3	6%
	Don't know	9	17%
	Not applicable	15	28%
	No answer/not checked	19	35%

Please specify the other area in the box below.

(Written responses not included)

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

**4. To what extent has OEC incorporated FirstNet’s nationwide public safety broadband network into the following areas?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Written guidance (i.e., plans, policies, procedures, governance structure, etc.)	To a large extent	7	13%
	To a moderate extent	28	52%
	To a small extent	11	20%
	Not at all	3	6%
	Don’t know	4	7%
	No answer/not checked	1	2%
Technical assistance offerings	To a large extent	8	15%
	To a moderate extent	24	44%
	To a small extent	11	20%
	Not at all	3	6%
	Don’t know	7	13%
	No answer/not checked	1	2%
Training opportunities	To a large extent	4	7%
	To a moderate extent	17	31%
	To a small extent	19	35%
	Not at all	7	13%
	Don’t know	6	11%
	No answer/not checked	1	2%
Workshops	To a large extent	4	7%
	To a moderate extent	23	43%
	To a small extent	16	30%
	Not at all	4	7%
	Don’t know	5	9%
	No answer/not checked	2	4%
Grant guidance	To a large extent	2	4%
	To a moderate extent	16	30%
	To a small extent	15	28%
	Not at all	11	20%
	Don’t know	9	17%
	No answer/not checked	1	2%
Other area	To a large extent	1	2%
	To a moderate extent	1	2%
	To a small extent	1	2%
	Not at all	2	4%
	Don’t know	26	48%

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

<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
No answer/not checked	23	43%

Please specify the other area in the box below.

(Written responses not included)

**5. In your opinion, how useful have OEC's efforts to incorporate FirstNet's nationwide public safety broadband network into the following areas been in helping your state address challenges with its emergency communications?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Written guidance (i.e., plans, policies, procedures, governance structure, etc.)	Very useful	19	35%
	Moderately useful	17	31%
	Not useful	11	20%
	Don't know	4	7%
	Not applicable	3	6%
	No answer/not checked	0	0%
Technical assistance offerings	Very useful	10	19%
	Moderately useful	22	41%
	Not useful	9	17%
	Don't know	6	11%
	Not applicable	6	11%
	No answer/not checked	1	2%
Training opportunities	Very useful	8	15%
	Moderately useful	17	31%
	Not useful	15	28%
	Don't know	7	13%
	Not applicable	7	13%
	No answer/not checked	0	0%
Workshops	Very useful	10	19%
	Moderately useful	22	41%
	Not useful	12	22%
	Don't know	6	11%
	Not applicable	4	7%
	No answer/not checked	0	0%
Grant guidance	Very useful	5	9%
	Moderately useful	17	31%
	Not useful	16	30%

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

	Don't know	7	13%
	Not applicable	9	17%
	No answer/not checked	0	0%
Other area	Very useful	2	4%
	Moderately useful	2	4%
	Not useful	1	2%
	Don't know	7	13%
	Not applicable	16	30%
	No answer/not checked	26	48%

Please specify the other area in the box below.

(Written responses not included)

6. Please provide any additional comments you have on OEC's efforts to address FirstNet's nationwide public safety broadband network as part of interoperable emergency communications.

(Written responses not included)

7. What, if anything, could OEC do to further address FirstNet's nationwide public-safety broadband network in its interoperable emergency communications efforts?

(Written responses not included)

**8. In your opinion, to what extent will OEC have a role for ensuring interoperable emergency communications once FirstNet's nationwide public-safety broadband network is fully operational?**

Response	Number of responses	Percent
To a large extent	39	72%
To a moderate extent	6	11%
To a small extent	4	7%
Not at all	1	2%
Don't know	4	7%
No answer/not checked	0	0%

8a. Please explain your response to question 8 in the box below.

(Written responses not included)

## OEC Coordination Support - Emerging Technologies

The questions in this section ask your opinion about OEC’s efforts to help the public safety community improve interoperable emergency-communications capabilities. This section will be about other emerging technologies.

### 9. Should OEC address the following emerging technologies in its interoperable emergency communications efforts?

	Response	Number of responses	Percentage
Wireless Local Area Networks (e.g., Wi-Fi)	Yes	42	78%
	No	7	13%
	Don't know	5	9%
	No answer/not checked	0	0%
NextGen 911	Yes	49	91%
	No	2	4%
	Don't know	1	2%
	No answer/not checked	2	4%
Other	Yes	14	26%
	No	1	2%
	Don't know	15	28%
	No answer/not checked	24	44%

9a. If you responded “Yes” to other, please specify in the box below.

(Written responses not included)

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

**10. In your opinion, how important is it for OEC to incorporate emerging technologies into the following areas?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Written guidance (i.e., plans, policies, procedures, governance structure, etc.)	Very important	48	89%
	Moderately important	6	11%
	Not important	0	0%
	Don't know	0	0%
	Not applicable	0	0%
	No answer/not checked	0	0%
Technical assistance offerings	Very important	43	80%
	Moderately important	11	20%
	Not important	0	0%
	Don't know	0	0%
	Not applicable	0	0%
Training opportunities	Very important	40	74%
	Moderately important	14	26%
	Not important	0	0%
	Don't know	0	0%
	Not applicable	0	0%
	No answer/not checked	0	0%
Workshops	Very important	40	74%
	Moderately important	14	26%
	Not important	0	0%
	Don't know	0	0%
	Not applicable	0	0%
	No answer/not checked	0	0%
Grant guidance	Very important	42	78%
	Moderately important	10	19%
	Not important	0	0%
	Don't know	0	0%
	Not applicable	1	2%
	No answer/not checked	1	2%

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

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Other area	Very important	1	2%
	Moderately important	0	0%
	Not important	0	0%
	Don't know	10	19%
	Not applicable	11	20%
	No answer/not checked	32	60%

Please specify the other area in the box below.

(Written responses not included)

**11. To what extent has OEC incorporated emerging technologies into the following areas?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Written guidance (i.e., plans, policies, procedures, governance structure, etc.)	To a large extent	12	22%
	To a moderate extent	35	65%
	To a small extent	5	9%
	Not at all	0	0%
	Don't know	2	4%
	No answer/not checked	0	0%
Technical assistance offerings	To a large extent	12	22%
	To a moderate extent	32	59%
	To a small extent	5	9%
	Not at all	0	0%
	Don't know	5	9%
	No answer/not checked	0	0%
Training opportunities	To a large extent	15	28%
	To a moderate extent	25	46%
	To a small extent	9	17%
	Not at all	1	2%
	Don't know	3	6%
	No answer/not checked	1	2%
Workshops	To a large extent	12	22%
	To a moderate extent	30	56%
	To a small extent	6	11%
	Not at all	0	0%



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

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Grant guidance	Don't know	6	11%
	No answer/not checked	0	0%
	To a large extent	11	20%
	To a moderate extent	19	35%
	To a small extent	14	26%
	Not at all	3	6%
	Don't know	7	13%
	No answer/not checked	0	0%
Other area	To a large extent	1	2%
	To a moderate extent	1	2%
	To a small extent	0	0%
	Not at all	4	7%
	Don't know	18	33%
	No answer/not checked	30	56%

Please specify the other area in the box below.

(Written responses not included)

**12. In your opinion, how useful have OEC's efforts to incorporate emerging technologies into the following areas been in helping your state address challenges with its emergency communications?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Written guidance (i.e., plans, policies, procedures, governance structure, etc.)	Very useful	25	46%
	Moderately useful	25	46%
	Not useful	1	2%
	Don't know	3	6%
	Not applicable	0	0%
	No answer/not checked	0	0%
Technical assistance offerings	Very useful	17	31%
	Moderately useful	29	54%
	Not useful	2	4%
	Don't know	4	7%
	Not applicable	2	4%
	No answer/not checked	0	0%
Training opportunities	Very useful	15	28%
	Moderately useful	25	46%

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

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
	Not useful	4	7%
	Don't know	7	13%
	Not applicable	2	4%
	No answer/not checked	1	2%
Workshops	Very useful	13	24%
	Moderately useful	33	61%
	Not useful	2	4%
	Don't know	4	7%
	Not applicable	0	0%
	No answer/not checked	2	4%
Grant guidance	Very useful	8	15%
	Moderately useful	31	57%
	Not useful	2	4%
	Don't know	10	19%
	Not applicable	2	4%
	No answer/not checked	1	2%
Other area	Very useful	0	0%
	Moderately useful	0	0%
	Not useful	0	0%
	Don't know	7	13%
	Not applicable	14	26%
	No answer/not checked	33	61%

Please specify the other area in the box below.

(Written responses not included)

13. Please provide any additional comments you have on the usefulness of OEC's efforts to incorporate emerging technologies into interoperable emergency communications.

(Written responses not included)

14. What, if anything, could OEC do to further incorporate emerging technologies into its interoperable emergency communications efforts?

(Written responses not included)

## OEC Communication Efforts

The following questions are about OEC's communication efforts with SWICs and the public safety community.

### 15. In your opinion, how well does OEC communicate to SWICs training opportunities in the following areas?

	Response	Number of responses	Percentage
FirstNet's nationwide public safety broadband network	Very well	19	35%
	Moderately well	19	35%
	Not well, I mostly learn from other sources	11	20%
	Not well, I am unaware of these opportunities	3	6%
	Don't know	2	4%
	No answer/not checked	0	0%
Emerging technologies (i.e., Wi-Fi, NextGen 911, etc.)	Very well	16	30%
	Moderately well	23	43%
	Not well, I mostly learn from other sources	13	24%
	Not well, I am unaware of these opportunities	1	2%
	Don't know	1	2%
	No answer/not checked	0	0%
Other	Very well	3	6%
	Moderately well	0	0%
	Not well, I mostly learn from other sources	1	2%
	Not well, I am unaware of these opportunities	0	0%
	Don't know	20	37%
	No answer/not checked	30	56%

15a. If you responded to other, please specify in the box below.

(Written responses not included)

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

**16. How satisfied or dissatisfied are you with the communication efforts from the following OEC organizational levels?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
OEC Headquarters	Very satisfied	18	33%
	Moderately satisfied	26	48%
	Neither satisfied nor dissatisfied	8	15%
	Moderately dissatisfied	1	2%
	Very dissatisfied	0	0%
	Don't know	1	2%
	No answer/not checked	0	0%
OEC Regional Coordinator	Very satisfied	43	80%
	Moderately satisfied	7	13%
	Neither satisfied nor dissatisfied	1	2%
	Moderately dissatisfied	2	4%
	Very dissatisfied	1	2%
	Don't know	0	0%
	No answer/not checked	0	0%
Other	Very satisfied	4	7%
	Moderately satisfied	0	0%
	Neither satisfied nor dissatisfied	0	0%
	Moderately dissatisfied	0	0%
	Very dissatisfied	1	2%
	Don't know	17	31%
	No answer/not checked	32	59%

16a. If you responded to other, please specify in the box below.

(Written responses not included)

**17. In your opinion, are there additional tools or approaches that OEC could use to improve communication with SWICs and the public-safety stakeholder community?**

Response	Number of responses	Percentage
Yes	26	48%
No	19	35%
Don't know	9	17%
No answer/not checked	0	0%

17a. Please identify and describe additional tools and approaches in the box below.

(Written responses not included)

**18. In your opinion, does OEC face any challenges that affect its ability to meet the needs of the public safety community?**

Response	Number of responses	Percentage
Yes	35	65%
No	9	17%
Don't know	10	19%
No answer/not checked	0	0%

18a. Please explain in the box below.

(Written responses not included)

**SAFECOM Grant Guidance**

The following questions ask your opinion about SAFECOM grant guidance for interoperable emergency communications equipment. OEC develops annual SAFECOM guidance in an effort to provide current information on emergency communications policies, eligible costs, best practices, and technical standards for state, local, tribal, and territorial grantees investing federal funds in emergency communications projects.

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

**19. In your opinion, how clear are the following aspects of the SAFECOM grant guidance for interoperable emergency communications equipment?**

	<b>Response</b>	<b>Number of responses</b>	<b>Percentage</b>
Available funding opportunities	Very clear	17	31%
	Moderately clear	18	33%
	Somewhat clear	12	22%
	Not at all clear	3	6%
	Don't know	3	6%
	No answer/not checked	1	2%
Compliance requirements for interoperability standards	Very clear	24	44%
	Moderately clear	18	33%
	Somewhat clear	8	15%
	Not at all clear	2	4%
	Don't know	2	4%
	No answer/not checked	0	0%
Reporting requirements (e.g. performance data)	Very clear	16	30%
	Moderately clear	25	46%
	Somewhat clear	8	15%
	Not at all clear	1	2%
	Don't know	3	6%
	No answer/not checked	1	2%
Other	Very clear	1	2%
	Moderately clear	0	0%
	Somewhat clear	1	2%
	Not at all clear	0	0%
	Don't know	20	37%
	No answer/not checked	32	59%

19a. If you responded to other, please specify in the box below.

(Written responses not included)

**20. In the past 2 years, has your state developed supplemental statewide guidance to clarify the SAFECOM grant guidance for interoperable emergency communications equipment?**

Response	Number of responses	Percentage
Yes	8	15%
No, but it is/was under consideration	16	30%
No, the SAFECOM grant guidance is sufficiently clear	21	39%
Don't know	9	17%
No answer/not checked	0	0%

20a. Please explain in the box below, why your state developed supplemental statewide guidance.

(Written responses not included)

**21. In your opinion, is there a need to improve the SAFECOM grant guidance for interoperable emergency communications equipment?**

Response	Number of responses	Percentage
Yes	16	30%
No	24	44%
Don't know	14	26%
No answer/not checked	0	0%

21a. If yes, please explain in the box below.

(Written responses not included)

## Closing

22. If you would like to expand upon any of your responses to the questions above, or if you have any other comments about OEC's interoperable emergency communications efforts, please write them in the box below.

(Written responses not included)

# Appendix III: Comments from the Department of Homeland Security

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



**Homeland  
Security**

November 29, 2018

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

Re: Management Response to Draft Report GAO-19-171, "EMERGENCY COMMUNICATIONS: Office of Emergency Communications Should Take Steps to Help Improve External Communications" (Job Code 102488)

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 efforts made by the DHS National Protection and Programs Directorate (NPPD) Office of Emergency Communications (OEC) and others regarding interoperable emergency communications. For example, GAO stated that OEC and the Federal Emergency Management Agency (FEMA) generally followed leading practices for effective interagency collaboration. In addition, GAO interviews with stakeholders showed OEC communicates frequently with its public-safety organizations through various mediums, and incorporated new emerging technologies into plans and offerings to ensure emergency responders and government officials plan and prepare for the use of broadband technologies. DHS and its Components will continue to work with public-safety stakeholders to improve interagency collaboration and communications.

The draft report contained one recommendation with which the Department concurs. Attached find our detailed response to the recommendation. Technical comments were previously provided under separate cover.

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

Sincerely,

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

Attachment



**Attachment: DHS Management Response to the Recommendation  
Contained in GAO-19-171**

GAO recommended that the OEC:

**Recommendation:** Assess its methods of communication to help ensure it has the appropriate tools and approaches to communicate quality information to public-safety stakeholders and as appropriate, make adjustments to its communications strategy.

**Response:** Concur. OEC receives outreach and stakeholder communications support from and works in collaboration with NPPD External Affairs to ensure appropriate engagement and outreach efforts are made available to public-safety stakeholders. External Affairs, working with the OEC, will develop a framework to assess methods of communication with public safety officials and determine the best approach in providing relevant and timely information on training opportunities, workshops, technical assistance offerings, and other emergency communications information to the public-safety community.

In an effort to improve NPPD's communications to ensure it is reaching the widest audience, OEC will also incorporate an agenda item regarding more effective communications to the 2019 OEC governance group meetings (i.e., Wireless Public Safety Interoperable Communications Program (SAFECOM), National Council of Statewide Interoperability Coordinators (NCSWIC), and the Emergency Communications Preparedness Center). Based on the feedback from public-safety stakeholders, in addition to the survey results from GAO's report, OEC will work with External Affairs to identify better methods of communication to include an enhanced social media presence and additional outreach to public-safety stakeholders about training opportunities. Estimated Completion Date: September 30, 2019.

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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); Ray Griffith (Analyst in Charge); Josh Ormond; Cheryl Peterson; Kelly Rubin; Andrew Stavisky; Sarah Veale; Michelle Weathers; and Ralanda Winborn made key contributions to this report.

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