

INTEROPERABLE COMMUNICATIONS: ASSESSING PROGRESS SINCE 9/11

HEARING BEFORE THE SUBCOMMITTEE ON EMERGENCY PREPAREDNESS, RESPONSE, AND COMMUNICATIONS OF THE COMMITTEE ON HOMELAND SECURITY HOUSE OF REPRESENTATIVES ONE HUNDRED THIRTEENTH CONGRESS

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Tuesday, November 18, 2014

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON EMERGENCY PREPAREDNESS,
RESPONSE, AND COMMUNICATIONS,
COMMITTEE ON HOMELAND SECURITY,
Washington, DC.

The subcommittee met, pursuant to call, at 10:23 a.m., in Room 311, Cannon House Office Building, Hon. Susan W. Brooks [Chairwoman of the subcommittee] presiding.

Present: Representatives Brooks and Payne.

Mrs. BROOKS. The Subcommittee on Emergency Preparedness, Response, and Communications will come to order. The subcommittee is meeting today to receive testimony regarding the state of interoperable communications.

Good morning. I first want to thank our witnesses for their flexibility in scheduling this hearing. We had originally planned to hold this hearing in September, if you recall, but we had to postpone it due to a joint session of Congress with the president of Ukraine. I appreciate you working with me and our staff to reschedule this important hearing today. Also want to thank you for accommodating us with respect to the delay this morning.

Unfortunately, communication challenges persisted during Hurricane Katrina. But we know much has changed since 9/11 and Hurricane Katrina, because it exposed significant gaps in communications capabilities. Congress then established the Office of Emergency Communications, known as OEC, in the Post-Katrina Emergency Management Reform Act to coordinate Federal interoperable communications programs and conduct outreach to support emergency response providers.

OEC has worked with States on the development of State-wide communication interoperability plans and, in 2008, issued the first National Emergency Communications Plan, which included goals for achieving communications capabilities at the State and local levels.

The Federal Emergency Management Agency's Grant Programs Directorate reports that States and localities have invested more than \$5 billion in preparedness grant funding to enhance their communications capabilities. These grants have been used by the States for planning, training, exercises, equipment, and to fund State-wide interoperability coordinator positions.

Congress finally addressed the 9/11 Commission's recommendation to allocate the D Block to public safety with the passage of the

Middle Class Tax Relief and Job Creation Act of 2012, establishing the First Responder Network Authority, known as FirstNet. This was long overdue, and as I discussed with former 9/11 Commissioner Chairman Tom Kean at a hearing the Committee on Homeland Security held earlier this year on the 10-year anniversary of the release of the report.

These are all important steps. In fact, they have been critically important steps, but we know that challenges still remain and more work must be done. Despite all of these programs, all of these investments, interoperable communications continue to be a challenge during disaster response, as evidenced during the response in Hurricane Sandy and the Navy Yard shooting. We must continue to work to ensure first responders have the tools they need to communicate.

I am pleased that, at the urging of myself and Ranking Member Payne, last week OEC released an updated National Emergency Communications Plan that takes into account the changes in technology since the first plan. I am looking forward today to hearing from Admiral Hewitt about this new plan—and congratulations on the release of the plan—the outreach he conducted with stakeholders during the plan’s development, and upcoming efforts to implement the plan’s five goals.

I am also looking forward to hearing more about FirstNet’s efforts to engage with States on the development of the Nation-wide public safety broadband network. This is a huge undertaking. I am interested in learning about the progress to date and the plans for the future.

I want to thank our witnesses for being here today as we collaboratively work together to ensure our Nation’s first responders have the tools they need to communicate both in their daily service and when disaster strikes.

We thank each of you for your service to our country, for your service to your communities.

[The statement of Chairwoman Brooks follows:]

STATEMENT OF CHAIRWOMAN SUSAN W. BROOKS

I first want to thank our witnesses for their flexibility in the scheduling of this hearing. We had originally planned to hold it in September, but had to postpone it due to a joint session of Congress with the president of Ukraine. I appreciate you working with me and my staff to reschedule this important hearing today.

As you well know, the 9/11 Commission report examined the communications failures first responders experienced at the World Trade Center, Pentagon, and in Shanksville, Pennsylvania and recommended the allocation of radio spectrum to public safety for the creation of an interoperable public safety communications network. Unfortunately, communications challenges persisted during Hurricane Katrina.

Much has changed since 9/11 and Hurricane Katrina exposed significant gaps in communications capabilities.

Congress established the Office of Emergency Communications (OEC) in the Post-Katrina Emergency Management Reform Act to coordinate Federal interoperable communications programs and conduct outreach to support emergency response providers.

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Despite all these programs and investments, interoperable communications continues to be a challenge during disaster response, as evidenced during the response to Hurricane Sandy and the Navy Yard shooting. We must continue to work to ensure first responders have the tools they need to communicate.

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I want to thank our witnesses for being here today as we collaboratively work together to ensure our Nation's first responders have the tools they need to communicate both in their daily service and when disaster strikes.

Mrs. BROOKS. With that, I now recognize the gentleman from New Jersey, Mr. Payne, for any opening statements he may have.

Mr. PAYNE. Thank you, and good morning. I would first like to thank Chairwoman Brooks for holding today's hearing on interoperable communications. I believe it will be our last hearing together, but I want to thank you for your leadership and your cooperation, working in a bipartisan manner on these issues.

Representing New Jersey's 10th Congressional District, our constituents were among the first to respond to the attacks on the Twin Towers on September 11. On that terrible day, first responders from multiple jurisdictions across disciplines heroically put themselves in harm's way to save others. Responding to a disaster of this scale was hard enough. The absence of reliable, effective communications during the response further complicated matters.

In the years since 9/11, the Federal Government, along with the State and local governments, has made significant investments toward achieving interoperability. During Hurricane Sandy, the response we saw was an improvement in cross-discipline communications. Police officers were able to communicate with firefighters across New York and with other officials in New Jersey, closing airports.

However, cross-jurisdiction communications challenges were evident. Specifically, emergency officials that came to provide mutual aid could not communicate with local first responders on their own radios. After the storm, the Department of Homeland Security, in coordination with the National Council of State-wide Interoperability Coordinators, "NCSWIC," convened a panel to identify lessons learned.

Among the recommendations generated were: Increased cross-border exercises and aligning State-wide interoperability coordinators with the communications emergency support function leads.

Although challenges remain, I was pleased to shine a positive light on the progress made, when in June, at my invitation, the subcommittee convened a hearing to look at Super Bowl XLVIII, which was held outside of Newark, New Jersey. At that hearing, the committee learned about the significant progress that has been made in addressing the lessons learned from Hurricane Sandy.

Indeed, interoperability communications was one area that many Federal officials and local first responders highlighted. I want to thank the Office of Emergency Communications for its assistance in helping first responders in New Jersey, and their partners in New York, plan, coordinate, and execute effective interoperability plans for that event.

That said, the progress made is in jeopardy. In recent years, States could rely on Interoperable Emergency Communications Grant Program to support their State-wide Interoperability Coordinators, SWIC, and other communication governance structures. But that program has been eliminated. Other sources for Federal support are scarce, particularly since the State Homeland Security Grant Program and Urban Areas Security Initiative are not funded at the levels they once were.

When I joined this panel last year, I was surprised to learn that my State of New Jersey did not have a SWIC. Now, I understand that a SWIC has been named, but it is one of many hats worn by this official.

The challenge of funding SWIC is not unique to New Jersey. Other States are facing the same funding challenge and, as a result, there is very real risk that important governance structures that have taken over a decade to build will be abandoned.

That is why today I am introducing the State-wide Interoperable Communications Enhancement Act, or the SWIC Enhancement Act. This legislation will ensure that States maintain the progress we have made towards achieving interoperability by preserving the governing structures necessary to make the communications technology work. These structures are key to achieving interoperability using existing technology and the networks and to realizing the full potential of the National public safety broadband network.

Before I close, I want to make clear: Interoperability challenges are not unique to State and local governments. Federal agencies share the same struggles. In November 2012, the Department of Homeland Security Office of Inspector General reported that DHS lacked a cross-component interoperable communications capability.

I introduced H.R. 4289, the DHS Interoperability Communications Act—with Chairwoman Brooks—to require the Department to put in place the policies and governance structure necessary to achieve interoperability between the Department's components. H.R. 4289 was passed unanimously by the House of Representatives earlier this year, and I am hopeful that the Senate will consider the bill before this Congress closes.

I want to thank the witnesses for being here today, and I look forward to your testimony. With that, Madam Chairwoman, I yield back.

[The statement of Ranking Member Payne follows:]

STATEMENT OF RANKING MEMBER DONALD M. PAYNE, JR.

NOVEMBER 18, 2014

I would like to thank Chairwoman Brooks for holding today's hearing on interoperable communications. Representing New Jersey's 10th Congressional District, I have constituents who were among first to respond to the attacks on the Twin Towers on September 11. On that terrible day, first responders from multiple jurisdictions—across disciplines—heroically put themselves in harm's way to save others.

Responding to a disaster of this scale was hard enough. The absence of reliable, effective communications during the response further complicated matters. In the years since 9/11, the Federal Government—along with State and local governments—has made significant investments toward achieving interoperability.

During the Hurricane Sandy response, we saw improvement in cross-discipline communication.

Police officers were able to communicate with firefighters across New York and with officials in New Jersey closing airports. However, cross-jurisdiction communications challenges were evident.

Specifically, emergency officials that came to provide mutual aid could not communicate with local first responders on their own radios.

After the storm, the Department of Homeland Security, in coordination with the National Council of State-wide Interoperability Coordinators (NCSWIC), convened a panel to identify lessons learned.

Among the recommendations generated were: Increased cross-border exercises and aligning State-wide Interoperability Coordinators with the Communications Emergency Support Function leads.

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And other sources for Federal support are scarce particularly since the State Homeland Security Grant Program and the Urban Area Security Initiative are not funded at the levels they once were.

When I joined this panel last year, I was surprised to learn that my home State of New Jersey did not have a SWIC. Now, I understand that a SWIC has been named, but it is one of many hats worn by this official.

The challenge of funding SWIC is not unique to New Jersey.

Other States are facing the same funding challenge and, as a result, there is a very real risk that important governance structures that have taken over a decade to build will be abandoned.

That is why, today, I am introducing the State-wide Interoperable Communications Enhancement Act, or the SWIC Enhancement Act.

This legislation will ensure that States maintain the progress we have made toward achieving interoperability by preserving the governance structures necessary to make the communications technology work.

These structures are key to achieving interoperability using existing technology and networks and to realizing the full potential of the Nation-wide Public Safety Broadband Network.

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H.R. 4289, was passed unanimously by the House earlier this year and I am hopeful that the Senate will consider the bill before this Congress closes.

Mrs. BROOKS. Other Members of our subcommittee are reminded that opening statements may be submitted for the record.

[The statement of Ranking Member Thompson follows:]

STATEMENT OF RANKING MEMBER BENNIE G. THOMPSON

As a former volunteer firefighter, I know that operable and interoperable communications are essential to ensuring that first responders can do their jobs safely and effectively. After the September 11 attacks, however, the 9/11 Commission identified interoperable communications among our Nation's most significant vulnerabilities in disaster response.

Despite initial Federal investments in the years following the attacks, interoperable communications challenges plagued the response to Hurricane Katrina, exacerbating the devastation.

In response to continued interoperability challenges realized during the storm, Congress created the Office of Emergency Communications at the Department of Homeland Security to bolster State and local capabilities to plan, coordinate, train, and evaluate interoperable communications efforts.

Since its inception, the Office of Emergency Communications has worked to help State and local governments build the governance infrastructures necessary to develop robust interoperable communications capabilities.

An essential component of that governance infrastructure are State-wide Interoperability Coordinators, or SWICs. SWICs have spearheaded efforts to develop State Communications Interoperability Plans, coordinate communications projects, and maintain governance structures.

With guidance from OEC, SWICs—together with State-wide Interoperable Governing Bodies—have built the communications teams that facilitated successful results to events from the Boston Marathon bombings to the tornadoes in Moore, Oklahoma.

Although this progress is encouraging, I was troubled that the 2014 National Preparedness Report indicated that 1 in 7 territories identified operational communications as an area at greatest risk of decline.

Since being appointed to serve on the then-Select Committee on Homeland Security during the 108th Congress, I have made helping the Nation resolve its interoperability challenges one of my top priorities.

Over a decade—and billions of dollars of investment—later, we have not yet made Nation-wide interoperability a reality. But we have made progress. Losing ground is not an option. In this austere budget environment, we simply cannot afford to go backward.

That is why I am pleased to support Ranking Member Payne, Jr.'s State-wide Interoperability Coordinator Enhancement Act. The SWIC Enhancement Act will ensure that States preserve the planning and coordination infrastructure that has been developed with previous Federal grant investments.

I look forward to working with Ranking Member Payne, Jr. to make sure Congress does its part to preserve the progress made toward achieving interoperability, and to ensure that the progress made is leveraged as technology evolves.

Along those lines, I am eager to learn about the progress FirstNet is making in its effort to build out the Nation-wide Public Safety Broadband Network.

If executed well, the new Network has the potential to resolve challenges that have undermined previous interoperability efforts—while being flexible enough to integrate new technologies.

I understand that FirstNet has completed a series of State consultations, and its recent Request for Information and Public Notice garnered significant public participation.

I am eager to learn about the State consultation process, and about the feedback to the RFI and Public Notice. In particular, I am interested to learn about feedback related to financing the Nation-wide Public Safety Broadband Network.

With all the time, money, and resources invested into this project at the Federal, State, and local level, sustainability is key to its success. Additionally, I am interested in learning how FirstNet is coordinating with the Office of Emergency Communications to conduct outreach to State and local stakeholders.

Mrs. BROOKS. We are pleased to have a very distinguished panel before us today on this important topic. Now, to begin those introductions, Rear Admiral Ronald Hewitt assumed the duties as director of the Department of Homeland Security's Office of Emergency Communications on November 13, 2012. TJ Kennedy is currently serving as acting general manager of the First Responder Network Authority, assuming the position after the position of General Manager Bill D'Agostino. He joined FirstNet as its deputy general manager on July 29, 2013. Mark Grubb serves as the director of the Delaware Division of Communications and is responsible for the operation and maintenance of Delaware's State-wide 700- and 800-megahertz public safety radio systems. In this capacity, he serves as the State-wide interoperability coordinator, SWIC. He also serves as the chair in the National Council of State-wide Interoperability Coordinators and is testifying on their behalf today.

Thank you for getting up at 5:30 and coming here to Washington, DC, today. So we want to welcome you all. The witnesses' full written statements will appear in the record, and the Chairwoman now recognizes Admiral Hewitt for 5 minutes.

STATEMENT OF REAR ADMIRAL RONALD HEWITT, USCG (RET.), DIRECTOR, OFFICE OF EMERGENCY COMMUNICATIONS, U.S. DEPARTMENT OF HOMELAND SECURITY

Admiral HEWITT. Thank you, Chairwoman Brooks, Ranking Member Payne, and distinguished Members of the subcommittee. It is a pleasure for me to be here today to provide you an overview of what the Office of Emergency Communications has done since our creation 7 years ago to improve emergency communications interoperability Nation-wide.

We released the National Emergency Communications Plan in 2008, which was the first strategic plan developed by public safety and was the roadmap we used for the past 6 years. The plan stressed the fundamental factors for successful interoperability, which include governance, planning, standard operating procedures, training, and exercises.

To implement the goals of the plan, State-wide interoperability coordinators and State-wide interoperability governance bodies were established in all 56 States and territories. These governance bodies were instrumental in developing State-wide communications interoperability plans that were aligned to the National plan. We also provided over 1,000 technical assistance visits and trained over 5,000 communications leaders and technical technicians to help implement the State plans.

These efforts have helped save lives. Just last year, our Nation faced another tragedy when two improvised explosive devices detonated near the finish line of the Boston Marathon. Sadly, the bombs killed 3 people and injured nearly 300 more, but nearly all the after-action reports agreed that greater number of lives could have been lost if not for the successful response to the bombings, which included effective emergency communications.

Our role in preparing for the event began in 2010, when as part of Goal 1 assessment of the National plan, OEC observed that communications capabilities during the marathon that year. Our assessment recommended integrating communications into the

event's overall command-and-control functions. We provided technical assistance and trained additional communications unit leaders and technicians. We also facilitated State-wide planning workshops to ensure the public safety entities understood the need and the roadmap to achieve interoperability. This focus on the fundamentals came into play immediately, as the responders treated the wounded, moved people to safety, and secured the area using public safety radio systems that kept up with the demand throughout the event.

But even with these program successes, we cannot become complacent, because the emergency communications landscape is changing. Next-generation 9-1-1 will bring text and information services to the Nation's public safety answering points or 9-1-1 centers. FEMA is improving public alerts and warnings to provide geographic-specific information to citizens. One of the most exciting changes that will impact the way first responders communicate is the Nation-wide public safety broadband network. I am honored to sit next to my fellow panelist, TJ Kennedy, from FirstNet today.

To account for all these changes, the public safety community updated the National Emergency Communications Plan, and I am pleased to announce that the Secretary of the Department of Homeland Security signed the plan earlier this month. The 2014 plan will be the road map to achieve emergency communications interoperability in this new landscape.

Similarly to the way we executed the 2008 plan, we rely on my fellow panelist, Mark Grubb, and all his fellow State-wide interoperability coordinator to update their governance structures and their State plans to align with the 2014 National plan. Additionally, we will update our technical assistance, training programs, and Federal grant guidance to ensure these plans are successfully implemented.

In conclusion, we will continue to concentrate on the fundamentals of governance, planning, standard operating procedures, training, and exercises, for effective emergency communications, even with technology 100 years from now, can never exist without them. This subcommittee and committee have been excellent partners in this effort, and I look forward to continuing the conversation with you about how best to continue the National effort.

Once again, I thank you, Chairwoman Brooks, Ranking Member Payne, and Members of this subcommittee for allowing me to testify today.

[The prepared statement of Admiral Hewitt follows:]

PREPARED STATEMENT OF RONALD HEWITT

NOVEMBER 18, 2014

Thank you, Chairman Brooks, Ranking Member Payne, and distinguished Members of the subcommittee. It is a pleasure to discuss the Department of Homeland Security's (DHS) collaborative efforts to improve interoperable communications for emergency response providers and Government officials. Thirteen years after the attacks of September 11, 2001, there still is no shortage of reminders of the need for an effective and efficient emergency response framework to manage incidents and restore essential services in the aftermath of a disaster.

A top priority for DHS continues to be improving the communications capabilities of those who are the first to arrive at the scene of a disaster site—the Nation's emergency responders. Public safety personnel must have access to reliable and instantaneous communications at all times to effectively coordinate response and re-

covery operations. The Department recognizes that establishing emergency communications is not solely a technology problem that can be solved by equipment alone. All of the critical factors for a successful interoperability solution—governance, standard operating procedures, training and exercises, the integration of systems into daily operations, in addition to technology—must continue to be addressed through the collective work of our programs.

Further, DHS believes that effective emergency communications require continued partnering with the millions of emergency responders who are the first to arrive on the scene of an incident, as well as the communications industry, non-governmental organizations, the general public, and citizens of affected communities. In addition, we continue to work closely and collaboratively with FirstNet as they pursue their mission of establishing a Nation-wide interoperable broadband network dedicated to public safety which will be an integral part of the continued evolution of effective public safety communications. We look forward to discussing our respective efforts and key accomplishments to make the Nation more secure and resilient to the threats and hazards which pose the greatest risk.

OFFICE OF EMERGENCY COMMUNICATIONS

The Office of Emergency Communications (OEC) was established within the National Protection and Programs Directorate's (NPPD) Office of Cybersecurity and Communications (CS&C) as part of the Congressional response to the communications challenges faced during the September 11, 2001 terrorist attacks and Hurricane Katrina in 2005. Since its inception, OEC has been focused on improving the communication capabilities of the Nation's emergency responders. To that end, OEC coordinates policy and assists in the development and implementation of operable and interoperable emergency communications capabilities for emergency responders at all levels of government, including Federal, State, local, Tribal, and territorial.

Since 2007, OEC has made progress in several key areas that enable emergency responders to interoperate in an all-hazards environment. In 2008, OEC led the development of the first National Emergency Communications Plan (NECP). The Secretary recently signed an updated NECP that outlines wholesale updates to the initial plan and accounts for the significant changes that have taken place within the emergency communications landscape in the past 6 years.

As an integral part of the development of the second NECP, earlier this year, OEC completed a comprehensive Nation-wide planning effort with more than 350 stakeholders from the emergency response community, which included significant feedback and coordination with the SAFECOM Executive Committee, the SAFECOM Emergency Response Council, and the National Public Safety Telecommunications Council. These stakeholder groups are comprised of National public safety association members, State and local emergency responders, and representatives within Federal agencies, and collectively represent the interests of millions of emergency responders, as well as the State and local governments served by public safety communications. Owing to this collaborative effort between OEC and our partners from the very beginning, the updated NECP encapsulates broad stakeholder input and is slated to gain wide acceptance within the public safety community.

OEC ACCOMPLISHMENTS

OEC has addressed National gaps in the emergency communications mission areas of planning, coordination, and training. OEC pursued a number of strategies to bring the Nation up to a baseline level of communications capability, characterized as a State where emergency response providers and Government officials can effectively communicate as needed and when authorized. OEC leveraged the Interoperable Emergency Communications Grant Program to help States and territories establish critical State-wide Interoperability Coordinators and governance structures such as the State-wide Interoperability Governance Board. These personnel and associated governance structures form the focal point and foundation for emergency communications efforts at the State and local level. Their on-going efforts remain vital even as their original grant funding mechanisms have been reduced.

Once established, State-wide Interoperability Coordinators and governing bodies were integral to building out the first State-wide Communications Interoperability Plans, which defined a roadmap for each jurisdiction to improve interoperability and emergency communications. In support of these efforts, OEC also provided technical assistance to every State and territory to assist in the implementation of their respective State-wide plan. The creation of State-wide Interoperability Coordinators and governing bodies represent an investment by Congress to create a State and local infrastructure to address these issues. To make the most of this investment,

these positions and these governing bodies should lead the way in ensuring that planning, coordination, training, and exercise at the State and local level, continue to drive efforts to incorporate new technologies into response-level emergency communications.

At the Federal level, OEC led the effort to establish the Congressionally-mandated Emergency Communications Preparedness Center to coordinate guidance for all agencies funding interoperability and emergency communications. By leveraging the SAFECOM Executive Committee and Emergency Response Council, OEC worked to ensure the adoption of new policies, plans, and standard operating procedures across our Nation. Moreover, OEC ensured that priority access services such as the Government Emergency Telecommunications Service and the Wireless Priority Services program were available for emergency response providers and Government officials from all levels of government when those personnel relied on commercial telecommunications services.

As a result of these efforts and OEC's continued focus on the fundamentals of planning, coordination, and training: interoperable emergency communications has improved Nation-wide over the last 7 years. To catalogue key successes:

- OEC has conducted more than 1,000 technical assistance workshops since 2007.
- OEC has trained over 5,000 emergency response providers and Government officials in communications positions that support the National Incident Management System.
- There are now more than 430,000 Government Emergency Telecommunications Service and Wireless Priority Services users.
- As part of implementing the first NECP, OEC evaluated the response-level communications capabilities of 60 urban areas and more than 2,800 county-level jurisdictions.¹ OEC found:
 - Most jurisdictions demonstrated consistent communications capabilities during events, with 74% of reporting counties indicating "established" or "advanced" level communications during routine incidents and events.
 - Nation-wide, the percentage of jurisdictions reporting formal interoperability standard operating procedures—those that are published and actively used by jurisdictions during incident responses—increased from 51 percent of respondents in 2006 to 86 percent in 2011.

We are proud of these accomplishments and the progress that they represent for our Nation's preparedness in emergency communications. No list of accomplishments, however, can ever compare to seeing such work put to use during an actual event like the Boston Marathon bombings.

Emergency Communications During the Response to the Boston Marathon Bombings

The tragic events of the 2013 Boston Marathon killed 3 people and injured nearly 300 more. However, nearly all of the after-action reports agree that a greater number of lives could have been lost if not for the successfully coordinated and executed emergency response, enabled by functional and interoperable communications. In the immediate aftermath of the bombings, brave emergency responders and Government officials relied on their training to quickly organize a chaotic situation, medical personnel triaged on the scene and later in hospitals, while ordinary citizens performed heroic feats for their fellow citizens. Emergency communications worked during the marathon bombings, due to the diligent efforts of Federal, State, and local emergency response providers and Government officials. OEC's role was to assist our partners in planning, coordinating, training, and exercising emergency response protocols before the Boston Marathon occurred.

In 2010, as a part of the NECP implementation, which focused on assessing emergency communications capabilities at the Nation's major urban areas, OEC assessed the Boston area's communications capabilities during that year's Boston Marathon. OEC's assessment recommended further integrating communications into the event's overall command-and-control functions. OEC provided technical assistance to the region to train additional communications unit leaders and provided DHS grant funding to train more communications unit technicians. The region also participated in several OEC-facilitated State-wide planning workshops, helping to ensure that public safety entities understood how to leverage existing resources and capabilities.

Prior to the 2013 Boston Marathon and based on a recommendation from the 2010 OEC assessment, the region also created a comprehensive event communications plan. The new communications unit itself added a medical command-and-control radio network.

¹The NECP defines response-level communications as the capacity of individuals with primary operational leadership responsibility to manage resources and make timely decisions during an incident.

This focus on the fundamentals of successful emergency communications—planning, coordination, training, and exercise—ultimately paid dividends as responders from all levels of government and across responder jurisdictions communicated seamlessly during the bombing incident response.

THE FUTURE OF EMERGENCY COMMUNICATIONS

Importantly, the response to the Boston Marathon bombings illustrated a rapidly changing landscape for emergency communications, one that involves not just traditional land mobile radio use by first responders, but also citizen communications and increased use of broadband or internet technologies. For example:

- The Boston Police Department was able to use alerts and warnings in conjunction with social media like Twitter to communicate with the public.
- Tools, like Google's People Finder, allowed the exchange of information from citizen to citizen.
- The FBI received information through video streams, pictures, and general tips.
- Public Safety Answering Points were able to utilize "Reverse 9-1-1" with the general public.

First Responder Network Authority

One of the most exciting of these new entrants into our Nation's emergency communications landscape is the Nation-wide public safety broadband network being developed by the First Responder Network Authority (FirstNet), and I am honored today to sit next to my fellow panelist, TJ Kennedy, acting general manager of FirstNet. OEC supports the DHS role as a board member of FirstNet, an independent authority within the Department of Commerce's National Telecommunications and Information Administration responsible for the development, deployment, and maintenance of a Nation-wide broadband network for public safety use. Since the establishment of FirstNet in February 2012, OEC has supported FirstNet planning, analysis, and outreach activities including:

- The Public Safety Advisory Committee, originally composed from a subgroup of the SAFECOM program, in its advisory capacity for public safety, State, local, Tribal, and territorial needs;
- The Cyber Infrastructure Risk Assessment, which will guide cybersecurity and resiliency planning for the Nation-wide public safety broadband network;
- Nation-wide technical assistance and planning support for States, territories, and localities to assist them with preparing for FirstNet consultation in their jurisdictions; and
- The Emergency Communications Preparedness Center, which established a FirstNet Consultation Group to coordinate Federal activities, such as the collection of data related to the needs of Federal users and Federal assets that may be leveraged to deploy the network

The success of FirstNet's mission is critical for the advancement of emergency communications for first responders, and promises to elevate public safety entities' ability to execute their duties with cutting-edge broadband applications, services, and devices. We are pleased with FirstNet's progress, and look forward to our ongoing collaboration in the advancement of wireless broadband communications capabilities.

Updated National Emergency Communications Plan

Within the ever-changing emergency communications landscape, including FirstNet and some of the technologies seen during the Boston Marathon bombings, the recently-released 2014 National Emergency Communications Plan updates the previous National strategy for successful emergency communications. While designing the updated NECP, OEC conducted more than 30 stakeholder meetings including representatives from the Federal, State, local, Tribal, and territorial levels; industry; and representatives from other parts of DHS. To reflect changes in technology and our changing definition of emergency communications, OEC expanded the scope of its outreach by eliciting feedback from public safety answering point personnel, emergency management agencies, and other public safety organizations that had not been included in the initial outreach to inform the 2008 NECP. The updated plan addresses new players who contribute to emergency communications while continuing to drive the Nation toward the essential planning, coordination, training, and exercise elements.

OEC's outreach plan for updating the NECP was ambitious. OEC's implementation plan for the updated NECP will mirror that ambition. The implementation roadmap for the revised NECP includes updating State-wide planning workshops; providing technical assistance; revising Federal Government emergency communications grants guidance; updating the existing State governance structures to bring

in necessary players; and transitioning priority services such as Government Emergency Telecommunications Service and Wireless Priority Services to work within a digital or Internet Protocol infrastructure.

Finally, OEC is also focused on ensuring the core, existing communications infrastructure retains its capabilities. Land mobile radio continues to be the most prevalent method for emergency communications throughout much of our Nation. For example, even when FirstNet initially becomes operational for data, land mobile radio will still be needed to provide mission-critical voice until FirstNet can provide this capability.

CONCLUSION

Thank you, Chairman Brooks, Ranking Member Payne, and the Members of this committee. At OEC, we will continue to stress the fundamentals of planning, coordination, training, and exercise, through our revised National Emergency Communications Plan and associated activities. This committee has been an excellent partner in this effort and I look forward to continuing that dialogue. I am pleased to answer any questions that you may have about OEC and our leadership in emergency communications.

Mrs. BROOKS. Thank you, Admiral Hewitt. Congratulations again on the release of the plan.

The Chairwoman now recognizes Mr. Kennedy for 5 minutes.

STATEMENT OF TJ KENNEDY, ACTING GENERAL MANAGER, FIRST RESPONDER NETWORK AUTHORITY

Mr. KENNEDY. Chairwoman Brooks, Ranking Member Payne, thank you for inviting me to testify today on behalf of the First Responder Network Authority. I am very honored to have the opportunity to brief you on FirstNet's progress and the development of an interoperable Nation-wide public safety broadband network.

It is also a pleasure to be here today with key players who have been supporting FirstNet as we move forward, director of the Office of Emergency Communications Ron Hewitt, as well as Mark Grubb representing not just the State-wide interoperability coordinators, but he is also one of the single points of contact for FirstNet, as each State has identified just as the Act has laid out. Mark has been integral in what is happening with our consultation efforts and has been a leading member of what is going on with FirstNet in the States and we look forward to his testimony here today.

As you are aware, FirstNet was borne out of the 9/11 Commission report. The goal was to solve communications problems that public safety faced that day. FirstNet's mission is to bring that priority wireless broadband communications to millions of first responders at the local, State, Tribal, and Federal levels. The goal of this important endeavor is to facilitate seamless communications between police, fire, and emergency medical service agencies at every level of government.

Over the past 13 years, we have proven that we can't fix this problem with old technology alone and that, instead, we need to leverage modern broadband technology and the advances that the technology sector can bring to voice, video, and data for every police officer, firefighter, and paramedic in the country.

Using a dedicated Nation-wide public safety wireless network, FirstNet will provide a ubiquitous solution to a decades-long communication challenge and help keep our communications and first responders safer with advanced broadband services, devices, and leveraging applications.

FirstNet's goal of building a network to meet the needs of first responders is a matter of critical importance for all citizens of the United States. While the task ahead will not be easy, no project of National importance to public safety ever is.

FirstNet has been developing the leadership, staff, and team dedicated to this critical mission, and we have also been gaining insight and support from States, from public safety, and from other key stakeholders required to make this network a reality. This is public safety's network for the future that will allow police officers, firefighters, and EMTs to leverage the innovation taking place in the world today in wireless and mobile technology.

Over the past 12 months, we have seen dramatic progress at FirstNet. We have created a strategic program roadmap, and we are making progress against that plan each day. As we grow, it is important to remember that we develop a robust culture of public safety service, dedication to this important mission, and adaptability. All of these are central to our success that deal with innovation as it moves forward. Every person who joins the FirstNet team must be able to adopt these principles and work hard to meet this important public safety mission.

Our senior team has grown and is focused on the technical, business, and legal requirements to establish this important network. In September, we released a major request for information with our draft statement of objectives and a public notice and comment. We received impressive feedback from the public, from States, from vendors, from public safety agencies on both of these important and strategic steps for FirstNet, and we are working steadily towards the development of a comprehensive network solutions RFP.

Consultation is well underway, and we are covering a variety of areas, leveraging our key contacts with local, State, Tribal, and Federal partners.

In summary, we have accomplished a lot, yet much more remains to be completed. I believe that we are on the right path and that with a dedicated team working hard on the mission, we will make great strides in the year ahead. We are gaining momentum each day, and we are building a record of doing what we say we are going to do.

Our FirstNet team is passionate about this incredible mission to bring modern communication tools to law enforcement, fire, and emergency medical service personnel who respond to life-threatening emergencies across America and keep us safe and help us in our moments of greatest need. Thank you for allowing me to be here today, and I look forward to answering your questions.

[The prepared statement of Mr. Kennedy follows:]

PREPARED STATEMENT OF TJ KENNEDY

NOVEMBER 18, 2014

I. INTRODUCTION

Chairwoman Brooks, Ranking Member Payne, and Members of the subcommittee, thank you for inviting me to testify on behalf of the First Responder Network Authority (FirstNet). I am honored by the opportunity to brief you on FirstNet's progress in the development of an interoperable Nation-wide public safety broadband network (NPSBN).

It is also a pleasure to appear here today with the director of the Office of Emergency Communications (OEC) at the Department of Homeland Security (DHS), Mr. Ron Hewitt. He and his office have been tremendously helpful and supportive to FirstNet in sharing their expertise and experience.

Also with us today is Mr. Mark Grubb, representing the National Council of State-wide Interoperability Coordinators (NCSWIC). Mr. Grubb appears in his capacity as the State of Delaware's Governor-appointed FirstNet Single Point of Contact (SPOC). In this role, he is responsible for the coordination of outreach and education efforts within the State. Mr. Grubb has led a vigorous outreach effort within Delaware, and we are excited by his and his State's efforts.

II. BACKGROUND

The Middle Class Tax Relief and Job Creation Act of 2012 (Pub. L. 112-96) (Act) established FirstNet as an independent authority within the Department of Commerce's National Telecommunications and Information Administration (NTIA). Under the Act, FirstNet is tasked with building and operating a self-funding, sustainable, interoperable broadband network for public safety entities across the country and within U.S. Territories. The NPSBN will fulfill a fundamental need of the public safety community as reflected in the recommendations of the 9/11 Commission: FirstNet will finally bring 21st Century priority wireless broadband communications to millions of first responders at the local, State, Tribal, and Federal levels. Using a dedicated Nation-wide wireless network, FirstNet will help provide a ubiquitous solution to decades-long interoperability and communications challenges and help keep our communities and first responders safer with advanced broadband services, devices, and applications.

FirstNet's goal of building the Nation-wide public safety broadband network to meet the needs of first responders is a matter of critical importance for public safety. While the task ahead will not be easy, FirstNet is developing the leadership, staff, and support from States, public safety, and other key stakeholders required to make this network a reality for first responders and the public who call on them for help in their time of need.

In August 2012 the Secretary of Commerce fulfilled the statutory requirement of naming the FirstNet Board. As required by law, the members have specialized knowledge, experience, and expertise needed to develop the network. Our first board chair Mr. Sam Ginn led the organization until last summer when our new chair, Ms. Sue Swenson, was appointed to the position. We are grateful for Mr. Ginn's leadership and are excited by the continued energy and focus Ms. Swenson brings.

Over the past 12 months, we have seen dramatic progress at FirstNet. We have grown from 4 to 83 full-time employees, and we have established our headquarters in Reston, VA. The leadership team includes myself as acting general manager, a chief financial officer, chief technology officer, chief information officer, chief administrative officer, chief counsel, and other executives focused on the technical, business, and legal requirements essential to making the Nation-wide public safety broadband network a reality.

We have also opened a technical office in Boulder, Colorado, where much of our technical work is currently underway. At this facility, and through a coordinated relationship with the National Institute of Standards and Technology (NIST) and NTIA, we, among other things, are preparing to test various technologies to better understand how to ensure that the network is built efficiently and meets all of the goals of the act.

III. FIRSTNET'S ROADMAP TO A SUSTAINABLE NPSBN

With these foundational efforts underway, we have narrowed our focus on what it will take from outreach, technical, and financial perspectives to build and maintain a public safety broadband network long-term. Much of our planning is embodied in our "FirstNet Strategic Program Roadmap," which was adopted by the FirstNet Board in March 2014. In that roadmap, FirstNet outlined the milestones it planned to accomplish over the next year, which include:

- beginning formal in-person State consultations;
- releasing a draft request for comprehensive network proposals for comment;
- releasing draft requests for certain network and equipment services proposals for comment; and
- initiating a public notice and comment process on certain program procedures, policies, and statutory interpretations.

FirstNet has made significant progress on these milestones:

- We distributed 56 State consultation packages on April 30, 2014. As of November 6, 2014, we have received 29 completed State checklists;

- We have launched formal State consultations, meeting with 7 States since July, with an eighth State scheduled in December;
- We released and received approximately 122 responses to a Request for Information (RFI) with a draft Statement of Objectives (SOO) for our comprehensive Request for Proposals (RFP); and
- We released and received approximately 64 responses to a public notice for publication seeking comment on several key program policies and statutory interpretations.

I would like to briefly describe the progress we have made to date and highlight where these efforts are heading.

A. *State Consultations*

Our efforts to interact with the States, Tribes, local jurisdictions, and Federal departments and agencies are a centerpiece of the FirstNet mission and are an essential requirement of the Act. Our State and local planning consultation process, coordinated through the Governor-designated State single points of contact, ensures that FirstNet obtains key information from the public safety community of all 56 States and territories and understands their unique public safety operations. Our goal from this process is to develop a detailed State plan for each State's review. This plan will inform a State's opt-in or opt-out decision, as provided for in the Act, how the State radio access network (RAN) portion of the Nation-wide network will be developed.

In order to execute on this statutory requirement, FirstNet has built a consultation strategy that focuses on several key objectives, ensuring that the consultation process is:

- Iterative, giving States and other stakeholders opportunities to provide feedback and input throughout the process;
- Collaborative, so that we are working together with the States to collect information and data that will be useful for the deployment of the network;
- Focused on critical elements, ensuring that we maximize the States and taxpayers' investments in FirstNet; and
- Informing inputs to RFPs, the delivery of the State plans, and the design, construction, and operation of the network.

Through the State consultation process, FirstNet anticipates holding numerous in-person meetings with each of the 56 States and territories over the next year and beyond. We formally launched our State and local planning consultation process on April 30, 2014, when we sent each State an Initial Consultation Package (ICP). The ICP provided key information to State leaders on the consultation process and topics that would be discussed during the initial consultation meetings.

FirstNet also included a readiness checklist to help each State provide FirstNet information about its governance structure, on-going outreach to key public safety stakeholders, and other details the State believes are important as FirstNet and the State collaboratively plan the NPSBN.

In conjunction with the delivery of the ICP, FirstNet extended invitations to conduct pre-consultation teleconferences with each State and territory to provide clarity on the initial consultation topics, answer any questions the State may have about the process, and to begin the dialog between the States and FirstNet on the critical issues associated with the NPSBN. As of today 44 States and territories have held teleconferences with FirstNet for this purpose.

With this preparation effort under way, FirstNet held the first formal consultation pilot meeting in July 2014 with leaders from the State of Maryland, including members from the Governor's office and executive agencies, the Maryland State Police, staff from the Maryland legislature, and other public safety leaders throughout the State. We learned valuable lessons about the State's emergency broadband communications needs, the State's perspective on the planning and deployment of the NPSBN, and how we can build a strong partnership with Maryland going forward. As of today's hearing, we have completed an additional eight initial consultation meetings in Minnesota, Oregon, Washington, Montana, Utah, Puerto Rico, and Iowa. We have one additional meeting scheduled for this year in Florida. We have planned an aggressive State consultation meeting schedule in 2015 and look forward to updating this committee on our progress.

Additionally, over the past year, FirstNet has conducted focused outreach with individual Tribes, Tribal organizations, and Federal Tribal Government liaisons and is working with the Public Safety Advisory Committee to establish a Tribal Working Group. The intent and tone of these discussions has uniformly been positive. FirstNet will formulate a tribal outreach campaign in late 2014 that involves Indian Country through combined State and Federal level engagement.

While we are pleased with our progress, we know much more needs to be done to continue to cultivate our relationships with each State, territory, and Tribal nation, and we are working feverishly to meet our statutory obligation and roadmap goals. To that end, FirstNet is hiring 10 regional teams to ensure sufficient resources in support of our outreach and State consultation efforts. These FirstNet regions cover the same States, territories, and Tribal nations as the 10 Federal Emergency Management Agency (FEMA) regions. Our teams will span the Nation to participate in consultation meetings, join various regional and State governing body meetings and association conferences, and meet one-on-one with the State single points of contact and public safety agencies representing potential FirstNet network users. FirstNet expects to hire these 10 regional leads in late 2014 and early 2015, and bring on additional regional staff throughout 2015 as appropriate to meet our goals.

Complementing this effort is FirstNet's robust outreach and education strategy, committed to reaching the public safety community across all levels of government and through National and State associations. In the past year we have addressed over 24,000 stakeholders at various conferences, meetings, and speaking events, and we plan to dramatically exceed that number in 2015.

We are also working closely with Federal agencies to drive collaboration and potential use of the NPSBN. Recently, FirstNet formalized a relationship with the Emergency Communications Preparedness Center (ECPC) to increase outreach with Federal stakeholders. The ECPC is the Federal interagency group focused on interoperable and operable emergency communications, and is administered by the DHS OEC. FirstNet has participated in many ECPC meetings over the past year to keep members informed of FirstNet activities and to discuss how best to collaborate to ensure Federal input is incorporated into the State plans. A Federal outreach team will be staffed in late 2014 to continue working with the ECPC and to expand efforts to engage one-on-one with the departments and agencies on a regular basis to better understand the unique needs of agencies and expand awareness of FirstNet.

Additionally, FirstNet's Public Safety Advisory Committee (PSAC), chaired by Mr. Harlin McEwen, and composed of key public safety stakeholders, will continue to be a key resource as we pursue our mission. Public safety's input via the PSAC is vital at all stages of the network's development so that it will be tailored to the needs of the end-users—America's first responders and other public safety entities. Although there is plenty of work to do, we are excited about our mission, and confident that we are on the right path.

B. Request for Information / Statement of Objectives

As we engage States and public safety, FirstNet also is actively conducting extensive market research to gain as much insight as possible into the capabilities, opportunities, risks, and innovative business partnerships in the market today to support the construction of a Nation-wide public safety broadband network for public safety entities. FirstNet is seeking further input from the public this fall that will help shape the direction of our future procurements, including the planned comprehensive network RFP and the equipment and network services RFP.

On September 17, the FirstNet Board released an RFI that included a full draft Statement of Objectives (SOO). The RFI sought input from industry on some of the key approaches FirstNet is considering before finalizing the draft comprehensive network RFP. The RFI included questions on network build-out, deployment, operations, and maintenance; cost considerations and financial sustainability; speed to market; system hardening and resiliency; user priority and preemption; customer care and marketing; and general compliance with the Act. The draft SOO will help industry better understand FirstNet's key program objectives in the creation, operation, and maintenance of the NPSBN. FirstNet is taking an objectives-based approach to our procurement, rather than a requirements-driven approach, in order to promote flexibility in achieving FirstNet's goals while helping FirstNet reduce the complexity we face in managing and integrating the diverse set of components needed to meet our mission. FirstNet will benefit from the creativity and expertise of respondents in identifying multiple ways to achieve a stated objective. FirstNet will use the comments it receives on the RFI and draft SOO to refine the acquisition approach and draft the comprehensive network RFP.

We have received more than 120 responses to the RFI and are very encouraged with the interest it has generated. All responses are being kept confidential, to provide the necessary assurances to the RFI responders to allow them to provide comprehensive and forthright solutions, facilitating FirstNet's ability to thoroughly develop the next step in the procurement phase, the draft RFP.

As this committee knows well, FirstNet is statutorily required to engage in an open, transparent, and competitive RFP process, and the release of this latest RFI is an important step in meeting this obligation. This RFI/draft SOO continues FirstNet's market research efforts and acts as a precursor to the issuance of a draft RFP estimated in early 2015.

C. Public Notice and Comment

FirstNet's Board coupled its September 2014 release of the RFI and draft SOO with a public notice. As a newly-created entity under a unique statutory construction, FirstNet is confronted with many complex legal issues and terms that will have a material impact on our RFPs and our operations going forward. This public notice sought comment on certain key interpretations of the Act to help inform our approach to our various RFPs and on-going operations. Specifically, the public notice sought comments on issues that include the definition of core and RAN; the definition of public safety entities—the ultimate primary users of the network; secondary users; rural area; user and other fees; and minimum technical requirements.

We were pleased to have received and are currently in the process of reviewing the more than 60 responses to the public notice. We received responses from a broad group of stakeholders including, commercial carriers and vendors, State, local, and Tribal governments, and various associations that represent public safety interests. The feedback on these topics will provide important inputs into the draft comprehensive network RFP and on FirstNet operations. Many of these issues could have significant impact on the economics of the NPSBN and the various solutions proposed by vendors. FirstNet needs to clearly define these terms prior to releasing the draft comprehensive network RFP so potential offerors have a common framework to submit responsive and competitive proposals. These responses are all public and can be viewed at www.regulations.gov.

D. Technical Development

Other than looking at the development of our RFI and the technical components of a future RFP, the FirstNet technical team has been focusing on a number of core areas:

- standards development;
- testing and evaluation;
- modeling and simulation.

As mentioned before we have been working very closely with the team at PSCR to ensure the sharing of ideas and open data and to eliminate information silos.

FirstNet utilizing PSCR for standards development

Working directly with PSCR has allowed FirstNet to make significant progress on the world-wide standards body for LTE. The standards body through which we are working is 3GPP. According to the 3GPP website, "The 3rd Generation Partnership Project (3GPP) unites [Six] telecommunications standard development organizations (ARIB, ATIS, CCSA, ETSI, TTA, TTC), known as 'organizational partner' and provides their members with a stable environment to produce the Reports and Specifications that define 3GPP technologies."¹ As a result of this collaboration, FirstNet has helped to develop broad coalitions who have pushed for the prioritization of public safety standards development in LTE.

Testing, evaluation, modeling, and simulation

Through this effort we have validated certain key elements and features for priority and preemption within the LTE environment. Further refinement is required to fine-tune these elements and this is underway. In addition the Technical team has assisted in validating certain of the key assumptions within the FirstNet program roadmap released back in March, including relating to the modelling of cell site location Nation-wide and the amount of excess capacity of our spectrum that might be available for secondary use.

Next steps

FirstNet will continue to work with PSCR throughout the development of the network. We have already seen tremendous benefit of our cooperative relationship and we are excited to achieve additional success. We will also be working very closely with the PSAC in order to help define the framework for priority and preemption on the network. Leveraging our public safety experts for this important task is crucial if we are to successfully reach a solution to this challenging topic.

¹ 3GPP website, "About 3GPP", <http://www.3gpp.org/about-3gpp/about-3gpp>.

IV. CONCLUSION

I am grateful to the committee for the opportunity to update you on FirstNet's progress. As you can see, FirstNet has dramatically advanced its efforts in the past 12 months to meet our statutory obligations, reach those who will use and benefit from our network, and develop a business plan that will provide a self-funding, innovative broadband service to first responders long-term.

We still have much to do to achieve our mission, and are moving forward with a continued focus on our primary long-term objectives:

- Deliver advanced, resilient public safety wireless broadband services;
- Minimize public safety user fees;
- Minimize the amount of capital and operating expenses incurred by FirstNet;
- Leverage synergies with existing infrastructure where economically desirable to FirstNet; and
- Maximize the value of our excess network capacity to keep costs low for public safety.

FirstNet has a difficult task ahead, but with the support of Congress, public safety, State and local jurisdictions, and the private sector, we will succeed in accomplishing our mission. This is a network that is urgently needed to increase the safety and capabilities of all public safety personnel and protect the American people, and we are committed to delivering it.

Thank you for your time. I would be pleased to answer any questions that you may have.

Mrs. BROOKS. Thank you, Mr. Kennedy.

The Chairwoman now recognizes Mr. Grubb for 5 minutes.

STATEMENT OF MARK A. GRUBB, DIRECTOR, DELAWARE DEPARTMENT OF SAFETY AND HOMELAND SECURITY, DIVISION OF COMMUNICATIONS

Mr. GRUBB. Good morning. Chairwoman Brooks, Ranking Member Payne, thank you for allowing me the opportunity to provide testimony today, and I would like to also thank the distinguished committee, and it is an honor to appear here with Mr. Kennedy and Admiral Hewitt.

As the emergency response community and State executives prepare to work with FirstNet on the build-out of the National Public Safety Broadband Network, we are also simultaneously coordinating the transition from 9-1-1 to next-gen 9-1-1. One of my additional duties in the State of Delaware is I am a Governor-appointed member of the Enhanced 9-1-1 Services Board, so I do have a wide look at all of the emergency response in the State of Delaware.

So these efforts will all enhance emergency communications for public safety, Government officials, and public, but they have also created a fast-evolving and more complex emergency communications landscape. With this evolution taking place, States and territories have a great opportunity to leverage their State-wide interoperability coordinator to ensure these capabilities are built out to the most efficient and effective manner possible.

Since September 11 and the implementation of the SWIC program, there are numerous examples of increased coordination intra- and inter-State. There have been significant improvements in State-wide communication systems, training, and education of first responders and communications staff and, most importantly, on-going coordination by the SWICs at every level, but our work is certainly not finished.

I think this point is certainly driven home by a recent quote from Oklahoma SWIC Nikki Cassingham after the tragedy of the Oklahoma tornadoes. I quote: "In conjunction with the State-wide Inter-

operability governing body, the SWIC built the State-wide communications, or CONU, including the communications leader, or COML, and communications technician, or COMT, credentialing program from the ground up and has made significant efforts to expand and improve the program since its inception. The success of the Oklahoma's COML/COMT program was demonstrated most notably in the aftermath of the EF5 tornado that tore through the city of Moore, Oklahoma, on May 20, 2013. Two State-certified COMTs were among the first to arrive on the scene to assess infrastructure damage, while the lead COML issued cache radios, requested additional resources, and drafted the ICS-205 Communications Plan. The knowledge and experience of Oklahoma's certified COMLs and COMTs played an enormous role in the success of the communications response to this event."

This is just one real-life example of improvements since 9/11 and is a direct result of the investments made by this committee. However, interoperability requires much more than just equipment; it is really about people in disparate agencies and jurisdictions including each other in their planning processes. In other words, it is about relationships and lines of communications.

As administrations change and people switch jobs, those relationships must be rebuilt, which require education and training. It is an on-going process, it is a very human process that must be maintained, year in and year out. It requires attention and dedication and, yes, it requires funding. If we don't have all of those things, we will not be able to maintain, much less improve upon, the interoperability progress we have made since 9/11.

With the current absence of SWIC funding, we are losing ground. The SWIC position was created with the support of the Department of Homeland Security's Office of Emergency Communications, and States used funding from the Interoperable Emergency Communications Grant Program to keep SWIC on staff. With IECGP funding now expired, many States are struggling to continue to fund the SWIC position and even keep the interoperability body operating.

Reinstating grant funding similar to IECGP is vital to the continued success of SWICs and interoperability. SWICs play an important role, but we could not do it without the support of the Office of Emergency Communications. South Dakota's SWIC, Jeff Pierce, said it best, when he said: "I have been involved in providing communications for the State of South Dakota for almost 35 years. In that time, the SWIC program and those initiatives implemented by OEC to promote interoperability have advanced public safety communications far beyond what technical developments have."

In conclusion, robust communications are a must for first responders in every State. A strong SWIC and appropriate levels of funding can help make that a reality by bringing people together, continuing a strategic vision for interoperability, and working toward the best solution for a State's citizens. Let us not forget the painful lessons learned from a lack of interoperable communications during 9/11. It is in every State's best interest to make effective use of this crucial position.

As you know, nothing in Government gets done unless there is a champion, especially with communications interoperability, a

problem that prior to the advent of SWICs often seemed to have no owner. The SWIC is the communications interoperability champion for the State and the Nation. Thank you again for allowing me time to provide this testimony. I look forward to your questions. [The prepared statement of Mr. Grubb follows:]

PREPARED STATEMENT OF MARK A. GRUBB

NOVEMBER 18, 2014

Chairman Brooks, Ranking Member Payne, and distinguished Members of the committee, I would like to thank you for allowing me the opportunity to provide testimony on this important topic. My name is Mark Grubb, I serve as the director of the Delaware Division of Communications in the Department of Safety and Homeland Security, and I am also the State-wide Interoperability Coordinator or SWIC for Delaware. In addition, I am honored to serve as the chairman of the National Council of State-wide Interoperability Coordinators. I am also Delaware's First Net State Point of Contact and I am an appointed member of Delaware's Enhanced 9-1-1 Services Board.

As the emergency response community and State executives prepare to work with the First Responder Network Authority (FirstNet) on the build-out of the National Public Safety Broadband Network (NPSBN), we are also simultaneously coordinating the transition from 9-1-1 to Next Generation 9-1-1, as well as maintaining existing Land Mobile Radio systems that provide mission-critical voice. These efforts will all enhance emergency communications for public safety, Government officials, and the public, but they have also created a fast-evolving and more complex emergency communications landscape. With this evolution taking place, States and Territories have a great opportunity to leverage their State-wide Interoperability Coordinator (SWIC) to ensure these capabilities are built out in the most efficient and effective manner. Since 9/11 and the implementation of the SWIC Program, there are numerous examples of increased coordination intra- and inter-State. There have been significant improvements in State-wide communication systems, training and education of first responders and communications staff, and most importantly ongoing coordination by the SWICS at every level, but our work is certainly not finished. I think this point is certainly driven home by a recent quote from the Massachusetts SWIC Steve Staffier:

"As I witnessed during the Boston Marathon bombings, even though we have all made significant investments in equipment and systems around the country, we still need help in education/training/outreach to the end-users and key decision makers . . . and this requires a SWIC and funding.

"These radios and systems don't talk on their own and the coordination doesn't happen without the SWIC and a COMU (Communications Unit) Team of COML's (Certified Communication Leaders) and COMT's (Certified Communication Technicians)."

Or the statement from Oklahoma SWIC Nikki Cassingham after the tragedy of the Oklahoma tornados:

"In conjunction with the State-wide Interoperability Governing Body (SIGB), the SWIC built the State-wide COML & COMT Credentialing program from the ground up and has made significant efforts to expand and improve the program since its inception. The success of Oklahoma's COML/COMT program was demonstrated most notably in the aftermath of the EF5 tornado that tore through the city of Moore, Oklahoma on May 2, 2013. Two State-certified COMT's were among the first to arrive on the scene to assess infrastructure damage, while the lead COML issued cache radios, requested additional resources, and drafted the ICS-205 Communications Plan. The knowledge and experience of Oklahoma's certified COML's and COMT's played an enormous role in the success of the communications response to this event."

These are real-life examples of improvements since 9/11 and are direct results of the investments made by this committee. However, interoperability requires much more than just equipment—it's really about people in disparate agencies and jurisdictions including each other in their planning processes. In other words, it's about relationships, lines of communications. As administrations change and people switch jobs, those relationships must be re-built, which requires education and training. It's an on-going process, a very human process that must be maintained, year in and year out. It requires attention and dedication and, yes, funding. If we don't have

all those things, we will not be able to maintain, much less improve upon, the interoperability progress we have made since 9/11. With the current absence of SWIC funding, we are losing ground.

SWICs play a central role in a State's emergency communications and interoperability efforts by working with first responders across all levels of government, acting as a central coordination and outreach point, and guiding efforts around the creation and implementation of State-wide Communications Interoperability Plans (SCIP). Because of their wide-angle view of communications across a State, SWICs can bring a vital perspective and strategic vision to a State's efforts, as well as guide thoughtful spending decisions, plan needed training and workshops, and improve preparedness State-wide. The Department of Homeland Security's Office of Emergency Communications has supported the development of SWICs, assisted with the creation and updates of State-wide plans, and helped States and territories form State-wide Interoperability Governance Body or State-wide Interoperability Executive Council to coordinate emergency communications. These existing structures and plans can and should be leveraged as States prepare for broadband and Next Generation 9-1-1.

Recently, States have been asked by FirstNet to appoint a State Point of Contact (SPOC) to assist with the planning and implementation phases of the NPSBN. In 18 States and the District of Columbia, the SWIC is also acting as the SPOC. In 12 States, the SWIC and SPOC both work within the same department, but in another 25 States the two roles are housed within separate departments. In addition, most States have a separate person responsible for 9-1-1 activities and the transition from 9-1-1 to Next Generation 9-1-1. With this structure, it is easy to see how the LMR, broadband, and 9-1-1 communication efforts can become separate programs with little coordination.

We have a tremendous opportunity for States to increase coordination across these various efforts to improve communications for public safety. The SWICs who are not the primary point of contact for broadband should include the SPOC and 9-1-1 Coordinators in the State-wide planning process while also expanding the existing State-wide governance structures to include the SPOCs, Chief Information Officers, and State 9-1-1 Coordinators. This would allow collaboration across all these various communication projects and ensure the SCIP is truly a comprehensive State-wide plan that addresses all elements of emergency communications.

For example, in Delaware, I have been asked to fill both the SWIC and SPOC roles and have also been asked by the Secretary and Governor to serve on the E-9-1-1 board. This will enable me to look at the three elements in the most comprehensive, strategic, and public-safety focused way. It also allows Delaware to use the governance structure of its existing State-wide Interoperability Executive Council to address the design and use of a broadband system in the State.

In addition to keeping the SWIC involved in a State's work with FirstNet, States should consider the following to make the best use of this valuable position.

CONTINUE TO PROVIDE FULL FUNDING AND SUPPORT TO YOUR SWIC

The SWIC position was created with support from the Department of Homeland Security's Office of Emergency Communications (OEC) and many States used funding from the Interoperable Emergency Communications Grant Program (IECGP) to keep a SWIC on staff. With IECGP funding now expired, many States are struggling to continue to fund the SWIC position and even keep the interoperability body operating. OEC has been working to ensure applicable grant programs recognize SWIC support as an allowable cost to help States keep this vital position funded.

I would also urge States to find the funds to continue to support this position that both creates value and ensures efficiency. Among their vital roles, SWICs can be cost savers by ensuring a State spends its emergency communications grant funding and budgets effectively. Because the SWIC is able to take a comprehensive view of a State's communications systems, it's easier to ensure an agency doesn't go out and spend money on a system that is redundant with a solution available in the State or invest in something that is incompatible with other current or emerging technologies.

In addition, SWICs are able to help jurisdictions respond better to natural disasters, emergency incidents, and large-scale planned events by focusing on State-wide planning and supporting broader training and coordination. A strong SWIC knows where each Communications Unit Leader is in the State, has them trained and ready, and can quickly deploy them to an incident commander for any type of response.

Mrs. Chairman, as you know, nothing in Government gets done unless there is a champion, especially with communications interoperability, a problem that often

seems to have no owner. The SWIC is the communications interoperability champion for the State and the Nation.

ELEVATE THE SWIC IN A STATE'S STRUCTURE

For the SWIC to be most effective, the position must be placed high enough within the State structure. We have some SWICs who are really strong and knowledgeable, but they are not placed in a position to effectively coordinate efforts, prepare for emerging technologies, and help ensure wise purchasing policy.

As Delaware's SWIC, I report directly the Secretary of the Department of Safety and Homeland Security who chairs the State-wide Interoperability Executive Council and reports directly to the Governor. The Secretary chairs the council's monthly meetings and votes as one of the 15 council members. The other members represent State and county governments and first responder groups.

I'm an active part of the council, but, by design, I am not a voting member. That neutrality gives me the opportunity to study and present facts, and then step back from any politics and allows the board to make its decision.

ACCESS THE NCSWIC NETWORK AND OEC'S SUPPORT

SWICs play an important role, but we could not do it without the support of OEC. The office really helps us do our jobs—especially in environments where funding has been cut—by setting priorities, bringing together the National Council of State-wide Interoperability Coordinators (NCSWIC), and providing guidance and training.

Before NCSWIC was created in 2010, SWICs didn't have nearly the bandwidth we have now because we couldn't reach across the country for ideas and support. We now have that deep bench and can get in direct contact with other SWICs who have faced similar challenges and scenarios. We can reach out and get really good answers and samples from other States' experiences and best practices. For example, Oregon worked with FirstNet to put together an incredible website on broadband for public safety. We got permission to utilize a lot of the framework from that website, and now Delaware has launched its State FirstNet site. The benefits of the NCSWIC came about because OEC helped set up the program and continues to support us in our joint efforts. In addition, by allowing each SWIC to request up to five technical assistance offerings each year, OEC empowers SWICs to bring additional training, education, and governance support to a State. South Dakota's SWIC, Jeff Pierce said it best:

"I've been involved in providing communications for the State of South Dakota for almost 35 years, in that time the SWIC program and those initiatives implemented by OEC to promote interoperability have advanced public safety communications far beyond what technical developments have."

CONCLUSION

Robust communications are a must for first responders in every State. A strong SWIC and appropriate levels of funding can help make that a reality by bringing people together, developing a strategic vision for interoperability, and working toward the best solutions for a State's citizens. Let us not forget the painful lessons learned from a lack of interoperable communications during 9/11. It is in every State's best interest to make effective use of this crucial position.

Mrs. BROOKS. Thank you, Mr. Grubb. I will now begin my line of questioning for 5 minutes.

I would like to ask Admiral Hewitt and—in your testimony, you noted that the first responder jurisdictions communicated seamlessly during the bombing incident and that that—in Boston. I understand that the radio networks worked extremely well and that had been—there had been training, extensive training that had taken place. But I have to share that I spoke with former Boston Police Commissioner Ed Davis and, in fact, he testified before the Homeland Security Committee—and I have seen him once since—and he indicated that the response was not without its challenges.

So while I am so pleased that the radio response went very well, first responders are also so accustomed to using their cell phones

and that the lack of cell service did impact the leadership's ability to communicate.

Can you talk about how OEC is working with Boston and—to address the lessons learned and where OEC is seeing these issues with respect to first responders also relying on their cell phones beyond the radio? What is OEC's, you know, thoughts and work on that particular issue? Because Commissioner Davis, you know, shared that they were unable to communicate on their cell phones. Any thoughts on that?

Admiral HEWITT. Thank you, Chairwoman Brooks. You are correct. In fact, there were news releases right after the bombing went off that the Federal Government shut down the commercial cellular network because—and it didn't. What occurs—the commercial networks are designed for a certain capacity, and that way exceeded that capacity, so only about 2 percent or 3 percent of the calls were actually going through, so it looked like it was shut down.

Office of Emergency Communications also has a National continuity program that has wireless priority services, WPS. That capability is available to public safety. In fact, in Boston, we had to—but unfortunately, they have to pay a service charge to do that, and because they are strapped with funds, they don't have that capability to do so.

For the Boston bombings, we ended up turning on about 150 phones, cellular commercial phones in that area, but you need it right away. So the other aspect we are doing now is increasing our training programs and education on WPS and to make sure they are aware of those so they can.

But at the same time, we have FirstNet, you know, working with TJ and the FirstNet staff, having that 20 megahertz of spectrum set aside for public safety and the cellular band, it is going to be tremendously helpful on the day-to-day basis. So between the two, having FirstNet coming on-line to give us excess capacity and educating in that—those that do have to have cellular commercial phones, that they have WPS. So it is really a training and exercise perspective.

Just like we have been focused on land mobile radio, we now have to educate people on how to use broadband and the capabilities that are there, ma'am.

Mrs. BROOKS. Okay, thank you. I assume WPS is similar to the GETS card? When I was U.S. attorney, I had a GETS card that would give me priority. Although you have to: (A) Remember that you have the card and the phone number that is in your wallet, or in your—you know, and, (B) just remember to use it, right?

Admiral HEWITT. Yes, ma'am. In fact, the GETS card, there is a long identification number, and it is very difficult to use. With WPS, you just dial star, 272, and then the phone number, and then it goes through, so it is a lot easier to use. But many folks in the public safety world—because, again, it grew out of a National continuity program—aren't educated on it and how to use it. We are doing our best to get that word out to everyone.

Mrs. BROOKS. Okay, thank you. Mr. Kennedy, today you have completed 7 or 8 State consultations—I think I have read 7 and the eighth is in December. Is that correct?

Mr. KENNEDY. Yes. We actually just added 1 last week, so 8 are now done and 1 more to go.

Mrs. BROOKS. Okay. Okay, thank you. Can you please share with me in my brief time left, how are these meetings going? What kind of changes have maybe you made to the consultation process since you started the process? What is your projected time frame for completion of State consultation, which I think will be critical in the success of FirstNet?

Mr. KENNEDY. Sure. There are a number of phases to State consultation. The first meetings that we are talking about is kind of the Phase 1 set of meetings. Just like you have mentioned, we have gone through these 8 meetings. We actually have Iowa today. We have Florida coming up in the very near future. So we are continuing to plug through this first set of meetings while looking forward to right after the first of the year conducting the rest of them.

We have 32 States that are now ready to conduct consultations, so 8 of those are already—have occurred, but we are continuing to go through State by State and meet with a number of key stakeholders. Some of these meetings have had over 170 participants representing city, county, State, and different agencies, Tribal involvement from public safety, lots of key State officials, if it refers to transportation and different communication elements to the State CIO.

So a lot of cross-functionality in the room to be able to discuss how FirstNet will make a difference. Just like the example you went through, it is the example of having that priority built into the system from Day 1 and having the devices in the hands of people who need it.

So it has worked very, very well to start and continue to push that conversation on consultation forward. We are looking for a number of phases to consultation. Right now, we believe there will be probably 4 over the next year. We want to finish this Phase 1 and get into Phase 2, so that is our current plan for fiscal year 2015. To move that—

Mrs. BROOKS. I am sorry, just to clarify, is Phase 2 just the next round of consultations? Or is Phase 2 an add-on to what you did with the States in Phase 1?

Mr. KENNEDY. Yes, so Phase 2 will build on what was done in Phase 1, so Phase 1 is a full-day interaction with each of the States with a number of different asks from us to the State on where are their public safety users, how do they plan to leverage the network, a number of key issues and priorities for the State that we will be going back-and-forth with them on. That second phase would build upon that Phase 1.

As we move forward, this will help inform our RFP process, as well as inform the State plan. The goal of this consultation is to result in a State plan for each Governor to be able to make a decision on opting in or opting out of the State radio access network portion of the FirstNet build-out.

Mrs. BROOKS. Again, what is your projected time frame as to when you think the State consultations might be completed?

Mr. KENNEDY. Sure. So the only one I can really comment on right now is Phase 1. I believe that in this fiscal year we will complete the first Phase 1 for each of the States. Because each State

is moving at a different time frame, as far as checklists and ability to get in, a lot of it is also at the mercy of when States are ready to have those conversations.

Mrs. BROOKS. How many States have submitted their checklists?

Mr. KENNEDY. Thirty-two.

Mrs. BROOKS. Okay. Okay. Thank you. With that, the Chairwoman now recognizes the gentleman from New Jersey, Mr. Payne, for questions.

Mr. PAYNE. Thank you, Madam Chairwoman.

Mr. Grubb, in your testimony, you note that it is critical that the existing communications governance structures such as State-wide interoperability governance bodies be leveraged as States prepare for broadband and NG 9-1-1. From your perspective, as the chair of the National Council of State-wide Interoperability Coordinators, to what degree are States leveraging resources of these existing governing bodies as emergency communications technology evolves?

Mr. GRUBB. Thank you, Mr. Payne. I can speak especially for Delaware, where the—we leverage our State governing body quite heavily, and in most States—not most States—in some States, they do, as well. That coordination helps significantly, because in that governing body, it is chaired by the secretary of safety and homeland security, and he reports to the Governor, so he is a voting member. There are 14 other voting members from agencies throughout the State of Delaware.

We have leveraged that for our broadband working group for FirstNet. So it has helped—it has helped quite a bit. There are a lot of States that have started to look at that structure as they move into FirstNet.

Mr. PAYNE. Okay. You know, Federal support for emergency communications governance infrastructure, from the interoperable emergency communications program to UASI and the State homeland security grant program, has diminished in recent years. Today, I am introducing, as I stated, the SWIC Enhancement Act, which aims to preserve advances in emergency communications, governance achieved over the past decade.

Can you talk about the degree to which the success of the current efforts at enhancing interoperability are dependent on these governance structures being in place, particularly with the evolving broadband capabilities needing to be integrated into the existing land mobile radio capabilities?

Mr. GRUBB. Yes, sir. First of all, I would like to take this time to thank you for introducing that bill, that SWIC bill. It is of significant help to the SWIC community and something we talk about quite a bit. Next, in a couple of weeks, the SWICs and SAFECOM will get together in Norman, Oklahoma, and I can tell you that they will be thrilled with hearing that news, so thank you very much.

From a coordination standpoint, you know, SWICs now focus more on FirstNet. They need to maintain that interoperability. One thing I have to say that is extremely important from a communications standpoint and interoperability is that land mobile radio, the networks that our first responders use for mission-critical voice, they are critical to be maintained for the foreseeable future.

That is one thing that I say in almost every meeting that I am a part of in the State of Delaware and elsewhere, is that although broadband will—FirstNet will bring data—and it is needed—mission-critical voice is the first thing that our first responders go to when they are an emergency situation. We had an officer in Delaware who was unfortunately killed in the line of duty years ago. He was stabbed by an assailant in the neck. Before he passed on the street, the first thing he reached for was his radio.

We need to maintain those radio systems and move into broadband so it provides additional data and additional resources for our first responders.

Mr. PAYNE. Thank you.

Mr. Kennedy, the State of New Jersey was awarded a Broadband Technology Opportunities Program, or BTOP, grant in 2010, and the FirstNet license—the frequency spectrum to the State to build the network in December of last year. Can you talk about the status of this project and how will FirstNet use the lessons learned from New Jersey's BTOP grant project to inform and develop a Nation-wide network?

Mr. KENNEDY. Absolutely, Ranking Member Payne. The deployable networks that the State of New Jersey are deployment as part of this key project are what we refer to as cells on wheels, often called COWs, and systems on wheels. These key systems really help out emergency providers both with big events, like the Super Bowl or events like that, that might occur, as well as large events that are unplanned for but also recur on a regular basis, like hurricanes, like you experienced with Hurricane Sandy.

The goal of the proof of concept network is really focused on three regions in New Jersey, the route 21 corridor, as well as in southern New Jersey in Camden and Atlantic City on the shore. All three of those will be key locations for us as we move forward to really see the different experiences we can get from those three geographic locations, and then that unique capability to be able to deploy to emergencies and respond to things like hurricanes, with additional broadband capability.

To the point mentioned a little bit earlier from Admiral Hewitt is having an ability with that dedicated spectrum that can make a difference during some of these very large events. So we prime to really leverage those key learning conditions. New Jersey is on track to complete that project on time, which is September 2015.

Mr. PAYNE. From what I understand in discussions with Homeland in the State of New Jersey, we are very proud of the work and accomplishments and the programs that we have made there and are really looking forward to implementing, want to be the first, so we continue to work hard on that.

Madam Chairwoman, I will yield back at this time.

Mrs. BROOKS. Thank you. At this time, we will start a second round of questioning. Mr. Grubb, you have the benefit of being both the SWIC, as well as what is called the SPOC. Any other acronym names you might have? But the SPOC is the FirstNet single point of contact for Delaware, as I understand, besides being the SWIC.

Can you—and I don't know whether or not many SWICs are SPOCs, as well, in other States—I am curious about that—but can you please share with us, what is your assessment of FirstNet's

and OEC's outreach with the SWIC and SPOC communities? You know, what is going well and what can be improved? Since you are getting ready to go to a National conference, I am sure that is a huge part of the discussion. So can you share with us what you and your colleagues are experiencing with respect to outreach?

Mr. GRUBB. Yes, ma'am, thank you. So the first part of your question, in 18 States and the District of Columbia, the SWIC is also acting as the SPOC. In 12 States, the SWIC and SPOC both work within the same department; in 25 States, the two roles are completely separate. So that gives you a little bit of a picture there.

I think, from my vantage point being the SWIC and the SPOC, and being on the 9-1-1 board, is significantly useful, because I get an overview of that entire landscape, and that is helpful in guiding resources and getting, you know, the little bit of funding that we do have where it needs to go. So that is significantly helpful.

Working with—let me start with OEC—working with the Office of Emergency Communications, Admiral Hewitt and his staff, is absolutely unparalleled. It is incredible. They are customer-driven and customer-focused. I could line up every SWIC in the United States and they would say exactly the same thing.

So I would like to congratulate the admiral and his team on the efforts that they have put through since 9-1-1. That is why the SWIC community is where it is today, and the outreach that we have been able to do is largely a part of their strong efforts over the past several years.

With FirstNet, the effort is also tremendous. TJ and his staff, they work tirelessly to bring broadband for public safety to—you know, to reality, and that I commend them on. I think that—as an independent authority, one of the things that holds them back is Federal regulations and hiring regulations. If they could get past that a little bit, I think that has held them back in hiring good candidates to help bring FirstNet even faster forward.

Mrs. BROOKS. Can you—or maybe Mr. Kennedy should delve into that a little bit further. What regulations are you referring to? Or Mr. Kennedy? That might be hindering faster implementation.

Mr. GRUBB. I know it is—but I know Mr. Kennedy can answer that a little better.

Mrs. BROOKS. Thank you.

Mr. KENNEDY. To Mark's comment, I think one of the things that we have realized as an independent authority inside the Federal Government is the Federal hiring process sometimes takes a little longer than we would like to see. One of the things that we have tried to do is make sure we get a lot of key technical talent and public safety talent into these key positions.

So as we look to staff our regions across the country, it has taken longer to get some of the key personnel into those positions and the key talent that we need on-board. We are continuing to move forward with requests for direct hiring authority from the Office of Personnel Management and really trying to make sure that we move forward with swiftness to be able to get the right staff on-board that will help States like Mark and the State of Delaware and others work through consultation.

Mrs. BROOKS. So when you request direct hiring authority from OPM, what is the manner of authority that you have now?

Mr. KENNEDY. We currently do not have any direct hiring authorities at this point. We are currently working in the typical OPM hiring system for Federal employees.

Mrs. BROOKS. Okay. Is there anything further beyond hiring, Mr. Grubb, that you would like to share with respect to outreach efforts from FirstNet?

Mr. GRUBB. Only to reiterate that their office is excellent at outreach, helping us outreach to our folks. We have been on the message of FirstNet for a couple of years now, and with the change in leadership and with some—I think it has been a little bit slow, to be honest, but it is understandable due to the size of the project that they are undertaking. It is astronomical.

But I think our folks in the State are getting just a little bit leery of the message that FirstNet is coming. It needs—you know, we need to get it here.

Mrs. BROOKS. Okay. Thank you. In light of the accolades you have given OEC in particular with respect to their work with you, I have to share that there is a rumor surfacing that the Department of Homeland is considering moving OEC from the National Protection and Programs Directorate into FEMA. It is my understanding that members of the public safety community are quite concerned about this.

Admiral Hewitt, do you know—does the Department have plans to move—restructure and move OEC?

Admiral HEWITT. Thank you, Chairwoman Brooks. As you may know, the Department of Homeland Security is undergoing a Unity of Effort analysis to improve mission delivery through cooperation and collaboration across the components. In their effort, though, there has been no decisions on any change within the National Protection and Programs Directorate, which I am a part of, or the Office of Emergency Communications.

If any—you know, before any decisions would be made, we would be up here first and consulting with you, just because of the legislation. It says we work for the Office of Cybersecurity and Communications. We would be happy to meet with you at any time to get your recommendations on how to do improvements.

Mrs. BROOKS. Thank you. Right answer on consultation. Just wanted to make sure that Department of Homeland Security remembered how the office was set up. Since it is working so well, we look forward to having that discussion prior to any reorganization.

With that, my time is up, and I turn it over 5 minutes' more questioning to Congressman Payne.

Mr. PAYNE. Thank you.

Admiral Hewitt, in your testimony, you talked about the importance—the contributions the SWICs have made in advancing our interoperability goals. As you know, I am introducing legislation today that I hope will help States preserve and build on that progress. Have you reviewed this legislation? You know, I would look forward to counting on you to work with me to make sure that the progress that, you know, has been achieved with respect to interoperability is not lost as grant funds become more scarce.

Admiral HEWITT. Thank you, Ranking Member Payne. As I mentioned, the Secretary of Homeland Security just signed the 2014

National Emergency Communications Plan, and for us to successfully implement it, it is going to require every—all 56 States and territories to update their governance structures, to update their plans, and then to execute those plans, so your support and understanding how important a role a SWIC is—just like at the National level OEC is kind of that coordinating body. Every State needs to have that coordinating body.

Just to give you an example, FCC manages over 126,000 public safety land mobile radio licenses. Every organization owns their own land mobile radio. That is why we have this interoperability problem. When they are working and they are doing their training and exercises, generally organization-centric, and having someone overriding that and say, hey, make sure you look out for when that incident occurs that is multi-discipline, multi-jurisdictional, to be focused on that and making sure that your systems interoperate is critical. So thank you for your leadership in moving this forward.

Mr. PAYNE. So what happens? What do you do where there isn't a SWIC in place?

Admiral HEWITT. There is—in 2010, we had 44 full-time SWICs. Just March of this year, it is down to 26. But there are part-time SWICs in all States, so we do have someone part time. It is just—and Mr. Grubb could probably answer that better, but I definitely think there is a difference being able to dedicate your time and then—and having a bunch of things on your plate.

Mr. PAYNE. Okay. Mr. Grubb.

Mr. GRUBB. I will go to Arizona as an example. Prior to the IECGP being lost, Arizona had a significant SWIC office. They honestly led the country in the way they were able to bring through COML training programs, COMT programs, coordination, oversight of technology. It was impressive. Now that really has gone away. That office has closed down. Their monthly governance structure meetings have gone to 1 per year, if that. At this time, the SWIC duties are maybe a quarter duty for the person who doesn't—has a full-time job and that happens in a significant number of States now.

It is—that split focus, it does not help, you know, interoperability moving forward. It really doesn't. Those are the things that we saw prior to 9/11 is there was no coordinator. Again, to my testimony, there was no champion of coordination for the States, and we are heading back in that direction unfortunately.

Mr. PAYNE. So do you feel that the SWIC should be a full-time position?

Mr. GRUBB. The SWIC should definitely be a full-time position. Not only should it be a full-time position, I think key is that the SWIC must be high enough level in State government to have effect on the outcome of this situation. What we have seen across the country is where SWICs have a director level or above position. They are much more effective in coordinating efforts of communications and interoperability across State government and county and so on and so forth.

Where we see a lower-level SWIC is where, you know, they are brushed under the table for the most part, and they are just not nearly effective, so that is a—you know, two-part answer, really.

Yes, full-time SWICs and they have to have a high-enough position in State government.

Mr. PAYNE. Well, in your position, you wear more than one hat. You are the SWIC, correct?

Mr. GRUBB. I am. I am the SWIC for Delaware. I am also the director of the division of communications, so we oversee the 800-megahertz radio systems for the State of Delaware. However, most of my focus on a daily basis is SWIC-related, so I have a team of people who focus on the operation of our mission-critical voice system, so there is a structure, but I count myself as a full-time SWIC.

Mr. PAYNE. Okay. I have another question, but I will yield back in the interest of time.

Mrs. BROOKS. Thank you. I think we are going to go to just one more round of questions. In the 008, Admiral Hewitt, National Emergency Communications Plan, OEC set three time-specific goals, and Goal 3 was that by the end of 2013, 75 percent of all jurisdictions would demonstrate response-level emergency communications within 3 hours in the event of a significant incident.

Was this one of the 90 percent of the goals in the new NECP reported as achieved? Isn't 3 hours a seemingly long time to set up a response? Can you comment on that? Are you still using the 3-hour window in the new plan?

Admiral HEWITT. I thank you, Chairwoman Brooks. Actually, the new plan—the goals that we have in there are higher-level. They are more strategic, because the landscape of emergency communications is much broader now. The first plan was geared towards land mobile radio, and it was geared government to government, or really response coordination between public safety officials.

But with the Boston bombings and other recent events, the landscape of emergency communications is expanded, next-generation 9–1–1. The biggest thing that I am most concerned with, lose sleep on, is the fact that there is a bomber that gets on a metro that someone is able to take a picture of, and that picture isn't able to go through NG91 to FirstNet and then out to alerts and warnings. We have to now open the aperture and make sure we have that interoperability of information and information services with that.

Mrs. BROOKS. How did you engage the private sector as you worked to update the NECP?

Admiral HEWITT. Thank you again for that question. We have—as the communications sector-specific agent for critical infrastructure in the comm sector, we briefed them on—we had over 80 private and commercial carriers involved in the plan. We have briefed them on and get their inputs. So we could bring them in, because they are going to be—as I mentioned, the ecosystem for emergency communications is expanding. Really, we have got to even ensure citizens have the ability to communicate.

Mrs. BROOKS. Okay, thank you. Mr. Kennedy, we hear a lot about spectrum monetization and the need for FirstNet to ultimately be self-funded. Who do you see as consumers of excess capacity on the FirstNet network? How do you plan to ensure that public safety has adequate priority usage of the network, if and when we go to spectrum monetization?

Mr. KENNEDY. So kind-of two key elements to that question. I think, first off, on the—guaranteeing public safety prioritization, it

is a key part of what we are doing in consultation. In consultation, we are covering really seven key elements—construction of the core and the radio access network build-out, placement of towers, coverage areas, adequacy of hardening security and reliability, assignment of priority. So key to that element is being able to have that priority capability and then really assigning priority and selecting users in training.

Those elements, though, of having that priority network is being built in from the ground up. So we have currently worked with our public safety communications research lab in Boulder, as well as our technical team, to test the priority functions that are needed on the network. The testing has been extremely positive. We have seen very good results from that. We will be building that into our RFP, so that the network will be built with that key priority in mind.

As far as the monetization of the network, the goal for sustainability is to have the ability for covered leasing agreements and having the ability to leverage parts of the network that are not being fully utilized on a day-to-day basis. We are building that into both our strategic plan and into our RFP process. We are very pleased with the current other spectrum auctions that are separate from our monetization that would occur as part of the secondary capacity on the network, and we have seen very good results from them. Because of that, we are encouraged that we will have additional funding to help support the network going forward.

Mrs. BROOKS. Thank you. Mr. Grubb, what challenges has Delaware faced, as was mentioned by Admiral Hewitt, while transitioning from 9-1-1 to next-gen 9-1-1?

Mr. GRUBB. We are right in the middle of that transition. So we are finished with our RFP. Moving forward, here in a couple of weeks, the board will vote on a solution, it appears. I think really the challenge is to make sure that everybody understands this is an evolutionary process. It will take some time to work.

I mean, this year, the wireless carriers were mandated to be able to serve and text to 9-1-1 centers. To my knowledge, from speaking to my colleagues across this country, where the few places that text to 9-1-1 is available, they only get very few texts, a couple. So it is—you know, that was interesting to me, I thought.

But it does, you know, lead you to understand that it is an evolutionary process. Even though we think that, you know, everybody wants to text to 9-1-1, they still prefer to call to 9-1-1. So we will get to text to 9-1-1. Then we will be texting pictures to 9-1-1. Then we will be texting eventually with broadband full video.

My concern—once we get to that point—is that the education for the call-takers, that is a whole different level of education that we have to contemplate now, because it is one thing to hear an emergency call, but it is completely another thing for them to view a crime taking place. So that is going to be part of that evolutionary process, so that—those are the challenges with the migration.

Mrs. BROOKS. Thank you very much. I need to suspend for 2 minutes to run down and place a vote, and I will return. The subcommittee will recess, subject to the call of the Chairwoman. Be right back.

[Recess.]

Mrs. BROOKS. The subcommittee will reconvene. Thank you for that. Let me catch a breath.

Congressman Payne, 5 minutes of questions.

Mr. PAYNE. Okay, thank you, Madam Chairwoman. Mr. Kennedy, first responders and public safety officials will be FirstNet's primary customers. How is FirstNet utilizing the Public Safety Advisory Committee? What tasks have been assigned or undertaken by the Public Safety Advisory Committee?

Mr. KENNEDY. The Public Safety Advisory Committee really leverages the great work that has been done in SAFECOM by a number of the same members that we have mirrored with our public safety advisory committee. They have looked at a number of key factors and are taking on some of the most important elements that are operational to the future of FirstNet.

A good example of one of the roles they played is they created use cases for how public safety will utilize the first responder network and how that will be—in an operational sense—marrying technology with public safety operations. Those use cases have become a basis for our technical team to build requirements and objectives around—that become part of our RFP process.

A really critical point, is when you look at how a police officer, a firefighter, a paramedic will operationalize the use of this new technology. So those use cases by the public safety advisory committee have been extremely beneficial to that work.

They have also looked at important issues like hardening and looking at resiliency and what we need to do to be resilient in building this network. They have also looked at key issues when it comes to defining a public safety user.

One of the things we did was work with the PSAC on some of our initial understandings to create our public notice and comment on public safety users to make sure that we are being very transparent and working with both the public safety advisory committee and the public in general on who will utilize the network and how will they utilize the network.

So I think we have done a great job of engaging with the public safety advisory committee. Our next meeting is coming up in just a few weeks in Norman, Oklahoma. We actually often put these meetings right next door to the SWIC meetings that are happening, as well, with SAFECOM, so that we have the key players around the country from the 56 different States and territories that are a part of that key discussion along with the public safety advisory committee meeting in the same locations at the same time during that same week. They have really been a terrific help.

Chief Harlin McEwen has led that public safety advisory committee for FirstNet and the passion that we see from the vast representation across public safety that are part of the advisory committee has been a great help to FirstNet.

Mr. PAYNE. Thank you. You know, I understand that the RFI issue in September sought feedback on how to harden the public safety broadband network against cyber attack. Can you talk about the efforts being considered to harden the network against cyber attacks?

Mr. KENNEDY. Cybersecurity, as you know, is a critical priority for all of us in public safety and in the Federal Government. We

have been working very closely with a lot of the cybersecurity best practices from the Department of Homeland Security, working with Admiral Hewitt's team and others to make sure that we are leveraging those centers of excellence. We have also brought on-board full-time staff that are focused on cybersecurity.

For us, we are leveraging, how will this work in the new mobile environment going forward? Working with many different levels of agencies. So looking at city agencies, county agencies, and State agencies, and how do they get access to key law enforcement information, as well as deal with, you know, key information that needs to be kept safe, such as, you know, emergency medical service records and other things that would go across the network? So for us, cybersecurity has been at the forefront of our requirements as we build our key RFP objectives going forward for FirstNet.

Mr. PAYNE. Okay, thank you. I think I had one more. Mr. Kennedy, we are sticking with you.

Mr. KENNEDY. It is okay.

Mr. PAYNE. You know, as Mr. Grubb observed, you know, SWIC may not always be the FirstNet single point of contact. What is FirstNet doing to encourage coordination particularly in those States where those positions are in separate agencies?

Mr. KENNEDY. We are doing a number of things. Just like the example with trying to have meetings that are co-located, where a lot of the State-wide interoperability coordinators will be to make sure there is good open communication. We also work with all of the single point of contacts regardless of their background to work on who should be invited to key meetings. They obviously have their own discretion, but we certainly ask them to engage the SWICs, and we want them to engage heavily on those key conversations.

Also, with the different SPOC backgrounds that are out there, most of them are very much engaged in public safety across the States. Sometimes it is a key State public safety official, such as from the State police. Sometimes it is the homeland security adviser. Sometimes it is the State CIO. But they are often very well connected with key communications officials, both in public safety and in State and local government.

So we found a lot of good coordination in reaching out to the SWICs and others to make sure that there is open communication going on at all times on what is happening with FirstNet.

Mr. PAYNE. Thank you. Well, I would like to thank all the witnesses for their testimony today. I will yield back.

Mrs. BROOKS. Thank you. I, too, would like to thank all of the witnesses for their testimony. Sorry, this has been a bit of a choppy hearing, and I know we had a bit of a delay in beginning. Again, this was rescheduled. But really want to thank all of you for your work. I can think of—for all of our first responders, nothing is more important—truly, they can have all the equipment in the world, incredible equipment, but unless they can arrive on the scene or if they are on the scene when an emergency occurs, if they can't communicate, they won't be successful.

We have come a long way since 9/11. But we obviously—as you all have indicated—have a long way to go, and we must stay at it. I just want to also thank Congressman Payne for his work on this critically important issue. This has been a top issue for him from

the beginning. I want to thank you for your work. It has been an enjoyable 113th Congress, working together on a lot of important bipartisan legislation. We still need to get some through the Senate, I might add. Hope that we can do that.

But I also—while I don't have the slick, pretty copy, you know, getting the National Emergency Communications Plan done for 2014 is, I think, also a great accomplishment for the subcommittee and working with Homeland Security. But just always reminding the Federal agencies that it is our local partners on the ground that we need to, as well as the private sector with all of their innovation, that we need to make sure we are always listening to them as to what they need and what they can provide and certainly what our first responders need. So I want to thank you all very much.

The Members of the subcommittee may have additional questions for the witnesses, and we will ask you to respond to these in writing, if you should receive any. Pursuant to Committee Rule 7(e), the hearing record will be open for 10 days. Without objection, the subcommittee stands adjourned.

[Whereupon, at 11:32 a.m., the subcommittee was adjourned.]

