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“FEMA REAUTHORIZATION: ENSURING THE NATION IS PREPARED”

Submitted
By

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Introduction

Chairman Barletta, Ranking Member Carson and Members of the Subcommittee, this testimony is submitted jointly by Damon Penn, the Assistant Administrator of the National Continuity Programs (NCP) and Fred Endrikat, Urban Search and Rescue (US&R) Branch Chief for the U.S. Department of Homeland Security’s (DHS) Federal Emergency Management Agency (FEMA).

Thank you for the opportunity to discuss these important programs, which are valuable tools that help us achieve our mission to support our citizens and first responders across an all hazards environment.

First, we will discuss FEMA’s Integrated Public Alert and Warning System (IPAWS) and how we are working with stakeholders, including federal, state, local, tribal and territorial authorities, as well as the private sector, advocacy and non-profit organizations, to continue to improve on our efforts to ensure we reach the American public with critical messages that can save lives and property. Second, we will discuss National Urban Search and Rescue task forces and how they are being deployed throughout America to rescue survivors.

IPAWS Overview

FEMA’s IPAWS enables state, local, tribal, and territorial alerting authorities to send emergency alerts to citizens in their jurisdiction using multiple alerting channels simultaneously. The alerting channels available through IPAWS today are:

- Televisions and radios as part of the Emergency Alert System (EAS);
- Mobile phones and cellular devices through the Wireless Emergency Alerts (WEA) interface;
- National Oceanic and Atmospheric Administration’s (NOAA) All-Hazards Weather Radios;
- Internet websites and applications that monitor the IPAWS Public Alerts Feed; and
- Local siren systems, road signs, and other local systems that local communities choose to connect with IPAWS.

FEMA has worked over the past four years with emergency managers and public safety officials at all levels of government, the private sector, NOAA, and the Federal Communications Commission (FCC) to develop and deploy the IPAWS capabilities that are being used across the nation today to send citizens alerts and warnings quickly. This tool allows communities to make choices to ensure the safety of their citizens.

Any public safety official, coordinated through their state, local, tribal or territorial government, can become an IPAWS user or alerting authority. The IPAWS Program Management Office
(PMO) assists all applicants with the process of becoming alerting authorities. All public safety officials using IPAWS to send public alerts must complete FEMA-sponsored training and have their own tool to interoperate with IPAWS and generate alerts. As of September 12, 2013, 33 states, two territories, and 163 local agencies have become IPAWS Alerting Authorities, and 11 states and 160 local agencies are presently in the application process. Since June 2012, the National Weather Service (NWS) has been using IPAWS to send WEA alerts for: tornadoes, flash floods, hurricanes, extreme wind, blizzards and ice storms, tsunamis and dust storms, and also began posting weather alerts to the IPAWS Public Alerts Feed this summer. The National Center for Missing and Exploited Children (NCMEC) and America’s Missing Broadcast Emergency Response (AMBER) coordinators in each state and territory have also been using IPAWS to send WEA AMBER alerts since December 2012.

Alert Channels Available Through IPAWS

Each of the IPAWS alerting channels offer a different avenue for public safety officials to send alerts that can save lives and reduce property losses. The integrated access to and use of multiple channels to send emergency alerts to the public provides for a higher likelihood that citizens in danger will receive the alert and further, if an individual receives the same alert from more than one communications channel, increases the likelihood that they will respond to the alert message.

IPAWS is the core system that serves as the foundation for several other systems, alerts and warnings.

EAS is the back bone of public communications provided by the broadcast, cable, and satellite radio and television providers across the nation. Known as “EAS Participants”, broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers, and direct broadcast satellite (DBS) providers have supported the capability for officials to address emergency alerts and information to the public for over four decades. EAS is used by authorities in a region in accordance with a state EAS Plan as well as NWS to deliver emergency alerts and information about emergency events to local populations. EAS is a component of the IPAWS but also maintains a traditional resilient broadcast method for communicating alerts between stations and to the public even when other communications channels fail.

FEMA, with assistance and partnership from the FCC and NOAA, is responsible for implementation, maintenance and operations of EAS at the federal level.

NOAA’s All Hazards Weather Radio system has been accessible through IPAWS for approved authorities to send alerts about non-weather emergencies since 2010. Alerting authorities using IPAWS, who have been approved by the National Weather Service, may broadcast emergency alerts directly from NOAA Weather Radio transmitters via a system interface maintained between IPAWS and NOAA.
Wireless Emergency Alerts are the newest alerting channel that has been successfully used over the past year by local officials in New York City and Boston and widely by the National Weather Service and State AMBER coordinators through the NCMEC. WEAs can be sent from alerting authorities through FEMA’s IPAWS directly to WEA-capable cell phones and other mobile devices in an affected area. WEAs are short messages that can appear like typical text messages, but unlike typical texts, these messages are broadcast to all capable phones within range of designated cell towers. WEA messages automatically “pop-up” on the home screen and include a unique attention tone and vibration cadence when received by a capable cell phone and include brief information about the type of warning, the duration of the warning, and who is sending the alert.

Internet web services and application developers may also choose to monitor IPAWS for display or delivery of alerts relevant to their users. Examples in development include smart phone apps, news and situational awareness webpages, and Facebook. Although no products have been deployed as yet, IPAWS is looking to leverage private sector innovation to explore new ways of alerting Internet users and other internet connected communications channels.

Most alerting authorities already have a range of unique tools, systems and technologies to alert and warn the public in their jurisdiction. These systems, which often include emergency telephone networks, siren systems, digital road signs, and email or text message subscription services, can be upgraded to interoperate with IPAWS. In fact, most local IPAWS users choose to use a local existing system to interoperate with IPAWS so that they can use a familiar system to generate local alerts and also utilize the IPAWS alerting channels.

**IPAWS WEA Success Stories**

The National Weather Service has been using IPAWS to effectively increase the distribution of severe weather alerts since June 2012 and has collected feedback from citizens about how the additional WEA alerting channel helped to save lives and property. Most notable was the account from a summer camp in Connecticut in July 2013. A camp staff member received a tornado warning via a WEA message and was able to evacuate 34 campers and staff from a domed athletic field just minutes before the winds from an EF-1 category tornado ripped the roof from the dome – spreading debris across the athletic field. Due to the manager’s quick and correct response to the received WEA alert, no one at the summer camp was injured.

The Department of Justice’s AMBER Alert Program, through the NCMEC, is relaying AMBER Alerts from law enforcement officials in accordance with state AMBER plans to send AMBER Wireless Emergency Alerts through IPAWS, and attributes the recovery of four children directly to this WEA message alert channel.

For example, on August 30, 2013, in High Point, North Carolina a student who received a WEA AMBER Alert describing a vehicle that was stolen from a grocery store on a Thursday night saw that vehicle on Friday morning while walking to her apartment. The University of North
Carolina at Greensboro student heard a baby crying inside of the vehicle and immediately called police. Because of the alert and because of the student’s actions, the 17-month-old baby inside was saved. NCMEC recently acknowledged FEMA’s contribution to these rescues, presenting Administrator Craig Fugate with an award on September 10, 2013 in recognition of the tremendous impact FEMA’s IPAWS system has had in saving the lives of numerous children.

During Hurricane Sandy, New York City (NYC) officials used an IPAWS WEA to issue an evacuation order to citizens in specific evacuation zones. Later as the storm moved into the city, the NYC officials used an IPAWS WEA to instruct remaining citizens to take shelter, stay off the streets and only use 9-1-1 for emergencies. During the police activity that led to the capture of the Boston marathon bombing suspects, the Massachusetts Emergency Management Agency also used an IPAWS WEA in coordination with local media coverage to alert the public that the shelter in place order was being amended late in the day to allow people at work to go home.

**Building Partnerships and Reaching Out**

Partnerships are critical for the success of IPAWS to date and to ensuring the collective success of IPAWS going forward – not just in terms of ensuring that emergency messages are delivered to citizens on a variety of channels, but to educate, assist, and learn from stakeholders across the nation.

The IPAWS PMO collaborates with recognized government, industry leaders, and technical experts to ensure that IPAWS is practical for public safety officials at all levels of government, supports the private sector communications providers who enable the delivery alert and warning information directly to citizens, incorporates the latest technology, and is as effective as practical at alerting all Americans. Additionally, the IPAWS PMO identifies venues and opportunities to reach key audiences from all partner groups, continually gauges results, and when needed, develops methods for improving communications.

*Strategic Outreach Plan*

While much progress has been made, there is still more to do.

The IPAWS PMO recently released a Strategic Outreach Plan, which serves as a road map to increase the awareness and understanding of IPAWS, promote adoption and usage of the technology, strengthen existing partner relations and develop new partnerships and interests.

The IPAWS PMO’s strategic direction addresses the U.S. Government Accountability Office (GAO) recommendations for “increased coordination and consultation with partners” and the IPAWS Strategic Outreach Plan helps the program continue to focus on these partnerships, acknowledging that they are a critical component to ensure that timely alerts and warnings are delivered to the American people.
In particular, the IPAWS PMO’s 2013-2014 strategic outreach goals include:

1. Increasing the awareness and understanding of IPAWS by all partners and the public, including ensuring the public understand how to respond to alerts;
2. Increasing the adoption and use of IPAWS by all partners, including to provide resources to make collaboration easier, to secure partner commitment and to provide partners with feedback mechanisms; and
3. Strengthening existing partner relationships and develop new partnerships and interests, including with Federal, State, territorial, tribal, and local authorities, as well as the private sector, advocacy and non-profit organizations.

This past year, to move forward on the first goal, FEMA developed Public Service Announcements (PSAs) for radio and TV, a 15-minute online course titled “IPAWS and the American People” and incorporated IPAWS and WEA information on Ready.gov. The PSA’s were created to draw the public’s attention and awareness to WEAs as a new and important lifesaving tool and directs viewers to learn more about lifesaving alerts on the new webpage at www.Ready.gov/alerts. The “IPAWS and the American People” course was designed to educate the public about the variety of alert and warning tools and technologies public safety officials can use to send them life-saving alerts and included a section focused on how the public should respond when they receive an alert.

The IPAWS PMO develops and provides informational resources for public safety officials, and works with all public safety officials who are interested in incorporating these and other products into local efforts to educate the public about emergency alerts.

To accomplish the second goal and increase adoption and use of IPAWS by all partners, FEMA frequently demonstrates a wide range of IPAWS capabilities while integrating alert origination tools, alert aggregation functions and alert dissemination technologies. During these demonstrations, IPAWS collaborates with numerous public and private sector partners to show alerts generated by multiple interoperable tools and systems as used by local and state agencies to activation and display of the alerts across all the IPAWS alerting channels in order to increase the impact of the demonstrations.

Additionally, the IPAWS PMO hosts regular webinars to speak about alerting system best practices, IPAWS specifics, and to inform about IPAWS compatible systems and technologies. These webinars are widely viewed and are tailored to respond to public safety officials and private sector feedback and requests for more information. The most recent webinar series addressed a request from alerting authorities for more information about alert origination software and tools that were interoperable with IPAWS. The next webinar series in development plans to address emergency alert redistribution systems.

Recognizing that well-trained users will make the best use of IPAWS, the IPAWS PMO assists public safety officials with all phases of the application process. Access to IPAWS is free;
however to send a message using IPAWS, authorized alerting officials must first select an IPAWS compatible alert originating tool, apply for a memorandum of agreement with FEMA, apply for public alerting permissions and complete FEMA’s Emergency Management Institute (EMI) Independent Study course IS-247a “Integrated Public Alert and Warning System.”

To achieve our third goal, FEMA is working to standardize and expand the discipline of public alerting and promoting best practices. FEMA is working with alerting authorities to update public alert and warning plans, working with the scientific community to explore development of consistent alerting codes and symbology that could be used to replace text in alerts and warnings, and partnering with various access and functional needs representative groups to better understand alert and warning gaps.

The IPAWS PMO released the “IPAWS Toolkit for Alerting Authorities,” which provides a collection of information for public safety officials related to why and how to become an IPAWS user. The toolkit contains information on IPAWS capabilities, alerting best practices, governance structures, technology requirements, operation and usage of IPAWS, testing and exercises, training, qualifying to be an authorized IPAWS alerting authority, building and strengthening relationships with private sector and other alerting partners and educating the American people about alerts and warnings. The IPAWS PMO actively promotes the toolkit and ensures it is available to all public safety officials.

The IPAWS PMO, in partnership with FEMA’s Office of Disability Integration and Coordination, hosts semi-annual roundtables for federal partners, private sector, and non-profit and advocacy organizations. The IPAWS PMO invites expert panelists to present at these roundtables, and the themes for past roundtables have included private sector and universities developing emergency communication technologies and products for Americans with Disabilities and access and functional needs. Looking forward, the IPAWS PMO has identified symbology for alerts and warnings as the theme for the next roundtable and will be facilitating working groups to advance this initiative.

Additionally, the IPAWS PMO published a white paper “Alerting the Whole Community: Removing Barriers to Alerting Accessibility” and continues to work with and train alerting authorities to communicate the benefits of IPAWS to the whole community within their jurisdiction, including Americans with disabilities and others with access and functional needs.

For non-English speaking populations, the IPAWS PMO is participating on industry technical and standards working groups addressing multi-lingual alerting dissemination technologies and tools.

Since January 2010, the IPAWS PMO has participated in more than 300 events and activities that have engaged Americans across all IPAWS partner groups. Moving forward, IPAWS will continue to engage partners through conferences, webinars, roundtables, technical demonstrations, working groups and other events.
Following the IPAWS PMO strategic plan, and in response to the most recent GAO Report “Emergency Alerting: Capabilities Have Improved, but Additional Guidance and Testing Are Needed,” the IPAWS PMO looks forward to collaborating with the FCC in using the 2011 national-level EAS test plan as a foundation to develop and implement a strategy for regular future national-level alert and warning tests.

This national-level test assessed the readiness and effectiveness of the system for the President to address the public during times of extreme national emergency. Radio and television broadcasters, cable, satellite, and wireline providers across the country participated in the test.

FEMA originated an Emergency Action Notification simultaneously to 61 Primary Entry Point stations that serve as national-level relay points. These PEP stations rebroadcasted the message in their coverage area to local primary stations and other monitoring stations.

The IPAWS PMO will continue to work to assist Federal, State, territorial, tribal, and local alerting authorities to implement local alert and warning tests and exercises utilizing IPAWS.

**IPAWS Goals and a Path Forward**

The ultimate goal of IPAWS is to enable timely alert and warning to the public to ensure the preservation of life and property. Effective alert and warning provided to citizens in harm’s way enables them to prepare for and protect against impending disasters thereby lessening the impact of and recovery time from natural disasters and other threats. FEMA understands that disasters are local and that local government has the primary responsibility to look after the welfare of its citizens, including the issuing of alerts and warnings. But FEMA also understands that consistent and effective alert and warning nationwide contributes to a stronger national preparedness posture, helping to mitigate, respond to, and recover from threats and assisting local and state authorities plan for, implement, and use effective alert and warning systems. FEMA takes that responsibility very seriously and is constantly working to make our collective public alert and warning system as effective, reliable, integrated, flexible and comprehensive as it can be and accessible to alerting authorities at all levels of government.

To ensure that the American people are educated and informed, FEMA is working toward further developing partnerships and outreach efforts with other Federal agencies and the private sector to make the most effective use of available resources.

The IPAWS PMO, in partnership with Federal, State, territorial, tribal, and local alerting authorities, public and private sector partners, Federal partners, and non-profit and advocacy organizations, will use every opportunity and available venue, to provide educational and actionable information to the American people.
**National Urban Search & Rescue (US&R)**

To achieve its mission of supporting citizens and first responders, FEMA uses tools including IPAWS alerts and warnings, and National Urban Search & Rescue (US&R) task force teams to achieve that mission.

FEMA has 28 mission-ready, National US&R task forces – complete with the necessary tools, equipment, skills and techniques – available for deployment to assist state, local, tribal, and territorial governments in rescuing survivors of structural collapse incidents or to assist in other search and rescue missions.

These task forces are located throughout the continental United States. Any task force can be activated and deployed by FEMA to a disaster area to provide assistance in structural collapse rescue, or they may be pre-positioned when a major disaster threatens a community. When activated by FEMA, the Task Forces become a Federal response resource that can be deployed anywhere in the Nation in response to a request for assistance by State, local, tribal, and territorial governments.

In response to the September flooding in Colorado, four federal US&R task forces were deployed (in addition to Colorado Task Force One that was utilized as a State resource) and assisted state and local authorities in rescuing survivors.

**National US&R Response System Task Forces**

Each National US&R Type I task force is made up of 70 multi-faceted, cross-trained personnel who serve in six major functional areas, including search, rescue, medical, hazardous materials, logistics and planning and who also include technical specialists such as physicians, structural engineers, and canine search teams. A task force is able to conduct physical search and heavy rescue operations in damaged or collapsed reinforced concrete buildings. It can also be divided into two 35-member teams to provide 24-hour search and rescue operations. Self-sufficient for an initial 72 hours, the task forces are equipped with convoy vehicles to support ground deployments and can be configured into Type III task forces to support events such as hurricanes, tornadoes, and other similar incidents.

**US&R Task Force Capabilities**

- Conduct physical search and rescue operations in damaged/collapsed structures;
- Provide reconnaissance to assess damage and needs, and to report results to appropriate officials;
- Render emergency medical care for trapped survivors, US&R personnel and search canines;
- Survey and evaluate hazardous materials threats;
- Assess and shut off utilities to homes and other buildings;
- Operate in a known or suspected weapons-of-mass-destruction environment;
• Provide structural and hazard evaluations of buildings; and
• Stabilize damaged structures, including shoring and cribbing.

As of 2008, the scope of Federal search and rescue operations under the National Response Framework (NRF) was expanded to address three main operational environments: structural collapse (urban) search and rescue; maritime/coastal/waterborne search and rescue; and land search and rescue. The NRF names four primary Federal partners who support such search and rescue operations: FEMA, the U.S. Coast Guard; the Department of the Interior/National Park Service; and the Department of Defense.

**The Importance of US&R Teams**

These US&R task forces are national assets that can be deployed by FEMA to assist state, local and tribal governments in rescuing survivors of structural collapse incidents or to assist in other search and rescue missions. They are a critical component of FEMA’s response system, helping to achieve FEMA’s mission of supporting our citizens and first responders to ensure that as a nation we work together to build, sustain and improve our capability to prepare for, protect against, respond to, recover from and mitigate all hazards.

**Conclusion**

Thank you again for the opportunity to appear before you today to discuss these important programs, which are valuable tools that help us achieve our mission to support our citizens and first responders to ensure that as a nation we work together to build, sustain and improve our capability to prepare for, protect against, respond to, recover from and mitigate all hazards.

We are happy to answer any questions you may have.