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EMERGENCY ALERTING

Capabilities Have Improved, but Additional Guidance and Testing Are Needed

GAO Accountability * Integrity * Reliability

Highlights

Highlights of GAO-13-375, a report to congressional requesters

Why GAO Did This Study

An effective system to alert the public during emergencies can help reduce property damage and save lives. In 2004, FEMA initiated IPAWS with the goal of integrating the nation's EAS and other public-alerting systems into a comprehensive alerting system. In 2009, GAO reported on long-standing weaknesses with EAS and FEMA's limited progress in implementing IPAWS. Subsequently, FEMA and FCC conducted the first-ever nationwide EAS test in November 2011. GAO was asked to review recent efforts to implement IPAWS and improve EAS. GAO examined: (1) how IPAWS capabilities have changed since 2009 and what barriers, if any, affect its implementation and (2) results of the nationwide EAS test and federal efforts to address identified weaknesses. GAO reviewed FEMA, FCC, and other documentation, and interviewed industry stakeholders and alerting authorities from six locations that were selected because they have public-alerting systems in addition to EAS and experienced problems during the nationwide EAS test.

What GAO Recommends

GAO recommends that FEMA work in conjunction with FCC to establish guidance for states to fully implement and test IPAWS components and implement a strategy for regular nationwide EAS testing. In response, the Department of Homeland Security (DHS) concurred with GAO's recommendations and provided examples of actions aimed at addressing the recommendations. DHS, FCC, and the Department of Commerce also provided technical comments, which have been incorporated as appropriate.

View GAO-13-375. For more information, contact Mark Goldstein at (202) 512-2834 or goldsteinm@gao.gov

What GAO Found

Since 2009, the Federal Emergency Management Agency (FEMA) has taken actions to improve the capabilities of the Integrated Public Alert and Warning System (IPAWS) and to increase federal, state, and local capabilities to alert the public, but barriers remain to fully implementing an integrated system. Specifically, IPAWS has the capability to receive and authenticate Internet-based alerts from federal, state, and local public authorities and disseminate them to the public through multiple systems. For example, since January 2012, public-alerting authorities can disseminate Emergency Alert System (EAS) messages through IPAWS to television and radio stations. Beginning in April 2012, alerting authorities have used IPAWS to transmit alerts via the Commercial Mobile Alert System interface to disseminate text-like messages to mobile phones. FEMA also adopted alert standards and increased coordination efforts with multiple stakeholders. Although FEMA has taken important steps to advance an integrated system, state and local alerting authorities we contacted cited a need for more guidance from FEMA on how to integrate and test IPAWS capabilities with their existing alerting systems. For example, an official with a state alerting authority said that additional guidance from FEMA is needed to determine what systems and policies should be put in place before integrating and testing IPAWS with other public alerting systems in the state's 128 counties and cities. In the absence of sufficient guidance from FEMA, states we contacted are reluctant to fully implement IPAWS. This reluctance decreases the capability for an integrated, interoperable, and nationwide alerting system.

The Federal Communications Commission (FCC) required all EAS participants (e.g., broadcast radio and television, cable operators, satellite radio and television service providers, and wireline video-service providers) to submit a report to FCC by December 27, 2011, on the results of the nationwide EAS test. As of January 2013, 61 percent of broadcasters and cable operators had submitted the required report. Of those, 82 percent reported receiving the nationwide test alert, and 61 percent reported successfully retransmitting the alert to other stations, as required. Broadcasters' and cable operators' reception of the alert varied by state, from 6 percent in Oregon to 100 percent in Delaware. Key reasons for reception or retransmission difficulties included poor audio quality, outdated broadcaster-monitoring assignments, and equipment failure. For example, poor audio quality of the test alert resulted in some broadcasters' receiving a garbled and degraded audio message and others' receiving a duplicate alert that caused equipment to malfunction. According to FEMA officials, the poor audio quality is being addressed, in part, with the deployment of a dedicated satellite network that will become fully operational by fall 2013. However, at the time of our review, FEMA and FCC had taken few steps to address other problems identified in the nationwide test. Furthermore, while FCC rules call for periodic nationwide EAS testing, it is uncertain when the next test will occur. Without a strategy for regular nationwide testing of the relay distribution system, including developing milestones and timeframes and reporting on after-action plans, there is no assurance that EAS would work as intended should the President need to activate it to communicate with the American people.