Federal Communications Commission 445 12th St., S.W. Washington, D.C. 20554

News Media Information 202 / 418-0500 Internet: http://www.fcc.gov TTY: 1-888-835-5322

DA 16-1452

Released: December 28, 2016

PUBLIC SAFETY AND HOMELAND SECURITY BUREAU RELEASES ITS INITIAL FINDINGS REGARDING THE 2016 NATIONWIDE EAS TEST

PS Docket No. 15-94

This Public Notice provides an initial overview of the nationwide EAS test results and highlights several opportunities for strengthening the EAS. The Federal Emergency Management Agency (FEMA), in coordination with the Federal Communications Commission (Commission) and the National Weather Service (NWS), conducted a nationwide test of the Emergency Alert System (EAS) at 2:20 PM EDT on September 28, 2016. The nationwide test was designed to assess the reliability and effectiveness of the EAS, with a particular emphasis on testing FEMA's Integrated Public Alert and Warning System (IPAWS), the integrated gateway through which common alerting protocol-based (CAP-based) EAS alerts are disseminated to EAS Participants.

The test also provided the Commission an opportunity to evaluate improvements made to the EAS since the 2011 nationwide EAS test and to improve its ability to monitor the performance of EAS Participants during nationwide EAS tests. At the direction of the Commission, the Public Safety and Homeland Security Bureau (the Bureau) launched the EAS Test Reporting System (ETRS), an electronic filing system and related database, on June 27, 2016. Using ETRS for the first time, EAS Participants nationwide registered accounts and submitted identifying information regarding their participation in the EAS. In the hours following the nationwide test, EAS Participants submitted "day of test" results that indicated whether they successfully received and retransmitted the test alert. EAS Participants submitted detailed analyses in the weeks following the test that specified how they received the alert and identified any complications they experienced during the test.

Key Observations from Initial Test Results

The Nationwide EAS Test was successful. Initial test data indicates that the vast majority of EAS Participants successfully received and retransmitted the National Periodic Test (NPT) code that was used for the test. The improvements made to the EAS using the lessons learned from the 2011 nationwide EAS test and the implementation of ETRS appear to have significantly improved test performance over what was observed during the 2011 test:¹

• Over 21,000 radio stations, broadcast television stations, cable systems, satellite services, and other EAS Participants in all 50 states and the U.S. territories participated in the nationwide test.

¹ It is noted that the Bureau is continuing to accept late-filed test results in ETRS at this time. These observations may undergo changes as EAS Participants continue to file and the Bureau conducts a more in-depth analysis of the test results.

This is a 26% increase in participation from the 2011 nationwide test (16,731 forms filed in 2011).

- 94% of test participants successfully received the test alert. This a 12% improvement in success rate over 2011 nationwide test (82% received in 2011).
- 85% of test participants successfully retransmitted the test alert.
- 69% of test participants reported no complications in receiving or retransmitting the test alert.
- Many EAS Participants reported that the test alert that they received featured the high quality audio from the CAP-based alert that FEMA distributed via IPAWS.
- For the first time, 74 EAS Participants retransmitted the IPAWS-generated Spanish language version of the alert.
- Reports from the PSSC proved effective for collecting feedback and should continue to be used for future EAS tests

Opportunities to Strengthen the EAS

From the data submitted by EAS Participants to ETRS, Bureau staff has identified several areas where the Commission could take steps to potentially strengthen the EAS. For example:

- Some EAS Participants experienced poor quality audio and were not able to deliver the Spanish language alert because they received the test from an over-the-air broadcast source before their EAS equipment performed its regular check of the IPAWS Internet feed (which typically occurs every 30 seconds). Requiring EAS Participants check the Internet-based IPAWS feed upon receiving a broadcast alert and transmit the corresponding CAP alert, if available, would ensure that the most timely and content-rich version of the alert is broadcast. This would be particularly important for time sensitive alerts where seconds matter like earthquake early warnings². The CAP alert would contain a crystal-clear digital audio file as well as any available text or audio files in languages other than English.
- Some people with disabilities reported difficulty receiving or understanding alert text or audio. EAS tests can be made more accessible by applying to EAS tests the accessibility rules that already apply to live EAS alerts.
- The preparations for the test highlighted shortfalls in some state EAS plans. Some plans were difficult for EAS Participants to locate, while others presented monitoring obligations and other information in a manner that EAS Participants found difficult to implement. The Commission can take steps to further facilitate the centralization and standardization of plan information.
- Some EAS Participants did not receive the alert because they did not properly configure or maintain their equipment. The Bureau, in coordination with State Emergency Communications

² See Earthquake Early Warnings Whitepaper (https://transition.fcc.gov/bureaus/pshs/eas/Earthquake_Alert_WhitePaper-120216.pdf) published by Federal Communications Commission.

Committees, state broadcast associations and other stakeholders, will use the test results to provide guidance to those EAS Participants that experienced technical difficulties.

• This test was conducted in an environment that posed a low threat for cyberattacks. A system whereby EAS Participants would integrate basic cyber security guidelines into the EAS equipment readiness rules so that they could self-assess and self-correct vulnerabilities in their facilities would harden the EAS against the range of cybersecurity threats that is generally present for actual alerts and tests.

Together with FEMA, the Bureau will continue to analyze the results of the 2016 nationwide EAS test and release more detailed findings and recommendations when available.

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