



PSHSBulletin



A Publication of the Public Safety and Homeland Security Bureau

October 2011

Preparations for the November 9, 2011 Nationwide EAS Test Entering Home Stretch

By Lisa Fowlkes

On November 9, 2011 at 2 p.m. Eastern Standard Time (EST), the Federal Communications Commission (FCC) and the Federal Emergency Management Agency (FEMA) will conduct the first-ever test of the Emergency Alert System (EAS). At that time, the familiar EAS tones will interrupt regular programming on every television and radio channel across the United States, whether broadcast, cable or satellite, followed by an announcement that begins "This is a test of the Emergency Alert System." The test will occur simultaneously across the United States and the U.S. territories and will last approximately three minutes, after which regular programming on all channels will resume.

The purpose of the test is to allow the FCC, FEMA and the EAS community to assess how well the EAS would perform its primary function: that of alerting the entire public about a national emergency. Should a national alert ever be issued, FCC rules require that all EAS Participants, that is all broadcast stations, cable operators, satellite radio and television providers and wireline video service providers such as Verizon FiOS and AT&T U-Verse, **must** interrupt their programming to provide the alert. All EAS Participants must take part in the nationwide test and must submit their test result data to the FCC within 45 days following the test (e.g., December 27, 2011).

The test is diagnostic in nature – to assess how well EAS equipment at the approximately 30,000 EAS Participant facilities nationwide can receive and propagate a nationwide alert to the public in the event of a national emergency. So, on November 9th at 2 p.m. EST, FEMA will initiate the EAS code for national emergencies. The EAS code and alert will be rebroadcast by broadcast stations and other EAS

Participants until it has been distributed throughout the entire country and U.S. territories. There will be similarities to the periodic monthly EAS tests with which many consumers are familiar. However, there will be some differences such as the test occurring on all stations and lasting a little longer than usual. In addition, due to technical limitations associated with the test's use of the actual live code for national emergencies (necessary if we want to test the actual system), the visual message accompanying the test may not indicate in all cases that the event is, in fact, a test. This is particularly true for consumers viewing the test over cable television.



The Public Safety and Homeland Security Bureau (PSHSB) and FEMA have taken a number of steps to address this limitation. PSHSB has worked with EAS Participants to develop technical solutions to address this issue. For example, the National Association of Broadcasters (NAB) has developed a slide that can be inserted onto the screen during the test that lets viewers know that this is a test. PSHSB has suggested to the cable industry, including major cable networks, that they air a brief message immediately before and after the test, with open captioning, explaining that this is only a test. PSHSB, along with FEMA, has engaged in extensive outreach efforts to the deaf and hard of hearing, as well as to other people with disabilities to ensure that they understand that the alert on November 9th at 2 p.m. EST is just a test. PSHSB, the Consumer and Government Affairs Bureau (CGB) and FEMA recently met with representatives of the deaf and hard of hearing community to discuss the test.

In addition to the deaf and hard of hearing community, PSHSB has taken

steps to reach out to other consumer and community groups to inform them about the test. For months, PSHSB and CGB have been communicating with over 100 consumer and community organizations, including those representing the elderly and those who do not speak English as a primary language. PSHSB and CGB have also developed a consumer fact sheet and guide and produced public service announcements, with captioning, in both English and Spanish. All of these materials can be found on the FCC's Nationwide EAS Test website at www.fcc.gov/nationwideeastest.

Recently, PSHSB Chief Jamie Barnett wrote the governor of each state and PSHSB staff contacted state emergency managers about the test. PSHSB, CGB and FEMA also have engaged in multiple outreach efforts directed at 911 Call Centers and state, tribal and local governments, including participating in webinars and briefings for government agencies. PSHSB and CGB have provided newsletter and blogs to over 40 national organizations representing public safety and other government officials. In addition, the FCC's Office of Legislative Affairs recently sent information about the test to all Members of Congress.

PSHSB also continues working with EAS Participants to help them prepare for the test. PSHSB recently prepared a step-by-step guide for EAS Participants with instructions regarding what to do on the day of the test. The Bureau is also launching a database that will allow EAS Participants to submit test result data electronically. The Bureau has hosted meetings with organizations representing EAS Participants and participated in numerous webinars hosted by FEMA, NAB, PBS and others to educate EAS Participants about the test. Finally, last summer, NAB produced a video, featuring PSHSB Chief Jamie Barnett, talking about the test. NAB sent the video to all broadcasters in their database.

For more information about the upcoming Nationwide EAS Test, please visit PSHSB's website at www.fcc.gov/nationwideeastest.

NG911 Cost Study Presented at September Open Meeting

By Pat Amodio

At the September 22nd Open Commission Meeting, Pat Amodio presented the Bureau's NG911 Cost Study. This paper will guide the Commission in its NG911 policymaking, and it is offered as a resource for other federal policymakers, as well as state and local governments and other stakeholders. The principal authors of the cost model are Pat Amodio, Dr. Henning Schulzrinne and Jennifer A. Manner. Other contributors include Brian Hurley, Tim May, Jerome Stanshine, John Healy, Genaro Fullano, Michael Ha, Walter Johnston and Bryan Upham.

This cost study examines two cost models for funding the construction and ongoing costs for nationwide NG911 network connectivity and call routing between the public safety answering point (PSAP) and the commercial service provider. It does not address other costs that PSAPs or carriers may incur in migrating to NG911, such as new systems located within the PSAP or upgrades to service provider networks to support NG911. The model calculates both capital or non-recurring costs and ongoing or recurring costs under two cost models validated by experts - a baseline model and a second model that assumes the realization of certain cost-efficiencies from PSAP consolidation and using hosted, as opposed to dedicated networks. Unlike modern E911 systems, which are forced to emulate the behaviors of legacy incumbent wireline utility calls to complete calls over wireline facilities, with NG911 the IP traffic access provider, communications service provider, network

operator, and server-side services may all be handled by different entities without sacrificing efficient IP routing.

The cost study also assumes that each PSAP will provide NG911 service using one of two network architecture solutions - dedicated or hosted.



Pat Amodio presents NG911 Cost Model at FCC Open Meeting, September 22, 2011.

Under the dedicated solution, the PSAP owns and operates all network, call routing, and call processing equipment and leases network connectivity. The dedicated solution requires more capital expenditures and ongoing cost support than the hosted solution, including the costs of operations and maintenance personnel to support the PSAP-specific NG911 infrastructure. The dedicated solution allows for greater PSAP-specific customization. Most current 911 systems are closer to the dedicated solution because most of the equipment for handling calls, such as the switch, is housed in the PSAP.

Under the hosted solution, a PSAP contracts with third party service providers for all network services and associated equipment, which are hosted offsite and are accessible by multiple PSAPs and

other public safety entities. Costs are based on administrative and monthly fees. Since this approach permits the sharing of information technology and system administration resources, the hosted solution is likely to be more cost effective than the dedicated solution. However, the hosted solution may not offer as many PSAP-specific customization options. For medium PSAPs, the hosted media processing systems, such as IP-PBX and conference bridges, are located closer to the PSAP, whereas for small PSAPs, they are regionalized. This reduces the initial investment required and allows for cost-sharing among PSAPs but also limits the extent to which services can be customized.

For the baseline model previously mentioned, the total ten-year cost, including non-recurring costs and recurring costs, is \$2.68 billion. A figure was included that showed non-recurring costs for the three size categories (a total NRC of \$1.23 B) and the projected recurring costs (of \$1.45 B).

Finally, the cost-effective model assumes that PSAP consolidation will result in a 35% decrease in the number of PSAPs as networks migrate to NG911. This model also assumes a greater reliance on hosted solutions, with 50% of large PSAPs and 75% of medium PSAPs opting for a hosted solution. The total ten-year projected cost under this model, including non-recurring and recurring costs, is \$1.44 billion. A figure was included that showed non-recurring costs for the three size categories (a total NRC of \$556 M) and the projected recurring costs (of \$888 M).

Upcoming Events

- November 30, 2011 - Open Commission Meeting, FCC Headquarters, Washington, DC

For more information about the Public Safety and Homeland Security Bureau, visit our webpage at <http://www.fcc.gov/public-safety-homeland-security-bureau> or email us at pshsinfo@fcc.gov.

Questions or Comments? Email your questions or comments concerning the content of this bulletin to Kim Anderson (kim.anderson@fcc.gov).