



The

Broadcasters' Desktop Resource

www.theBDR.net

... edited by Barry Mishkind – the Eclectic Engineer

NAB REPORT 2011

EAS at NAB 2011: The Potential Difference



By Richard Rudman

[April 20, 2011] Richard Rudman has been involved in EAS matters for many years on local, state, and national levels. During the Spring NAB show, he took special notice of what is going on – and how that affects stations, especially as they look to the new CAP/EAS receiver mandate.

The 2011 NAB Convention was an opportunity to find out as much as I could about where we are with the enhancement of EAS. As usual, the sheer size of the show prevented me from seeing everything I wanted to see, and talking with everyone I wanted to see. This article is an attempt to present as much as I could find that might be of interest to those of us who have to install the equipment, train staff in its use, and maintain FCC compliance.

As with the proverbial blind men evaluating the elephant, what I learned does not tell the whole story.

FEMA AND THE FCC – WAITING FOR SHOES TO DROP

At NAB, we learned from the FCC that they will issue the NPRM “soon.” And we learned from FEMA that the equipment manufacturers who have passed JITC muster will post the results themselves on the FEMA Responder Knowledge Base (RKB) website under the category of “Certification and Declaration.”

As the week progressed, it was revealed that Digital Alert Systems’ DASDEC, Trilithic’s EASyCAST, and Sage’s Digital Endec passed the Conformity Assessment. You will find data at <https://www.rkb.us/> as it is posted.

FEMA BOOTH DELIVERS INFORMATION

At the FEMA booth on the NAB show floor, more information was available that will allow us to make some educated guesses on what will be the near-term potential of CAP-EAS.

With the notable exception of broadcasters in states that have already set up their own CAP capability, most broadcasters will only be required to have a single TCP/IP address programmed into their EAS devices as the FCC's Report and Order only calls for broadcasters to be able to "accept" CAP messages from the federal server by the September 30 deadline. The process, known as polling, will have security and authentication hooks that should make the process secure.

CAP-EAS equipment from several vendors was also set up in the FEMA booth to demonstrate polling from a test server.

It was good to see that there were several broadcast-savvy people at the FEMA booth. Al Kenyon who was with Clear Channel might be a name you might recognize.

Also working the booth was Manny Centano (right), who is the program manager for the JTIC effort for CAP-EAS equipment.

Manny was a broadcaster when he lived in the Virgin Islands, and some of us got to know him many years ago when he was involved with the EAS Primary Entry Point program.



Manny Centano delivered a lot of information aimed at broadcasters' needs



Suzanne Goucher, President of the Maine Assn. of Broadcasters listens to a FEMA presentation

The training sessions held in the FEMA booth went into details on the Integrated Public Alerting and Warning System (IPAWS), the parent program for FEMA CAP-EAS efforts. (Links to the training materials will be posted as soon as they are received from FEMA.)

The various programs at the FEMA booth drew a large number of visitors who are active in the EAS or were seeking to find out answers to many questions that have been building over the past year or so.

PBS, DTV AND MOBILE TV

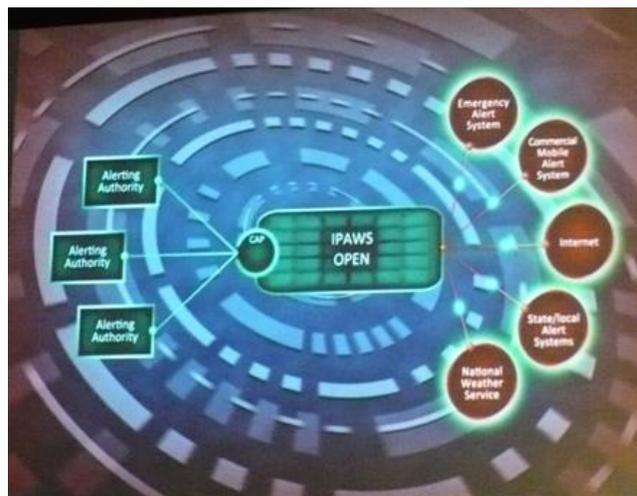
At a session on Tuesday, PBS announced a new pilot program to leverage the potential of Mobile DTV as part of IPAWS for the United States. Beginning later this year, PBS will initiate testing on a next-generation emergency alert system to deliver multimedia alerts using video, audio, text and graphics to cell phones, tablets, laptops and netbooks, as well as in-car navigation systems. The PBS pilot project will test capabilities designed to lead to a comprehensive, new Mobile Emergency Alert System (MEAS). The Advanced Television Systems Committee (ATSC) Mobile Digital TV broadcast standard is the core of this effort.

THE NAB BEC PANEL

The NAB Broadcast Engineering Conference EAS panels on Wednesday featured FEMA and FCC staff, a state broadcast association member, and representatives of some of the manufacturers of new EAS equipment.

The FEMA/FCC panel featured Read Admiral James Barrett (ret.), Chief of the FCC’s Public Safety and Homeland Security Bureau, Greg Cooke, FCC Public Safety and Homeland Security Bureau, Damon Penn, Assistant Administrator for FEMA’s National Continuity Programs, Antwane Johnson, FEMA Division Director and Program Manager for IPAWS, and Wade Witmer, FEMA Deputy Division Director for IPAWS.

Damon Penn started the session by showing an excellent short video that explained the IPAWS program (link to be announced).



The FCC’s Adm. Barrett said that recent disasters emphasize the need to reinforce the public/private partnership that is at the heart of EAS. The FCC’s Public Safety and Homeland Bureau, he said, is concentrating on making EAS more reliable, assuring that people at risk can receive alert messages wherever they are, and evaluating alerting modes for broadband communications technologies. EAS will continue to be the centerpiece for public alerting in the U.S., he added.

Barrett also talked about the announcement for the first ever, live code Emergency Action Notification (EAN) test later this year, an evaluation that will be based on what some of us call “classic EAS” that is the alerting mode used by the Primary Entry Point Program (PEP). PEP relay through National Public Radio (NPR) will also be tested. NPR was added as a PEP relay option in 2002 for areas that cannot receive a PEP station directly.

010-2011 Alaska EAS Test Problems and Mit

Summary of identified problems (2010 Test) and mitigation results

Incorrect ORG Code Used	Corrected
Cable Head End did not Air the EAN	Corrected
Origination Procedures	Corrected, Needs Improvement
Monitoring Assignments	Needs Improvement
Low Audio Quality & Amplitude	Improved - Needs Improvement
Text Crawl Inconsistencies	Future Rulemaking
Use of Washington DC FIPS Code	Future Rulemaking
Duplicate EAN Broadcasts	Improved - Future Rulemaking
EAS Device Installation Training	Improved - Ongoing
DTV & Subchannel EAS	Ongoing

FEMA

The two EAN live code tests in Alaska in 2010 and 2011 were discussed and a slide presented showing changes that were made for the recent 2011 test.

Witt Adamson, President of the Tennessee Association of Broadcasters represented state level stakeholders. While other panelists answered some concerns he brought up, details such as the National EAN Test public awareness campaign have not been fully revealed.

Antwane Johnson talked about the current expansion program for PEP. Twelve stations have been added to the initial 36 in the past 18 months. Nineteen more PEP stations are planned to come on line by the end of 2011. Thirteen “legacy” PEP stations will be refurbished.

The long-awaited installation of satellite delivery from FEMA to all PEP stations is in the works as well. Until the satellites come on line, PEP stations get their warnings via dialed connections over standard telephone lines, or as we refer to such connectivity, “plain old telephone service” (POTS).

BACK TO THE FLOOR

All the EAS vendor booth displays I visited had working equipment set up for demonstrations. Manufacturers were providing assurance that they can meet the needs of the broadcast and cable community for the September 30 deadline, but as of the end of the show only three at the show had announced that they had successfully passed certification by the JTIC.

On the show floor at the NAB Radio-Ready Cell Phone Showcase I saw a number of cell phones with broadcast radio reception chips that were set up to demonstrate emergency notification capabilities utilizing the Radio Data System (RDS) FM.

One vendor announced that their product can now pass Common Alert Protocol (CAP) EAS audio and text messages. As part of this demonstration, CAP EAS messages with text were successfully sent across an HD Radio broadcast channel.

A booth on the show floor highlighting Mobile TV had working hand-held mobile TV devices that were receiving news alerts using this technology. The Corporation for Public Broadcasting (CPB) is providing matching grants to local public television stations for Mobile DTV broadcasting equipment. PBS plans to announce stations for the pilot project in the near future.

THE POTENTIAL OF CAP-ENHANCED EAS

The concept of Voltage is rooted in potential difference. With both Voltage and EAS, nothing happens unless the potential of each is realized.

By now, a lot of industry Common Alerting Protocol (CAP) EAS watchers had hoped that the FCC would have released the Notice of Proposed Rulemaking (NPRM) and FEMA would have announced all of the results of their Joint Interoperability Testing Command (JITC) evaluation of CAP-EAS equipment. This is all pending. So, with a little more than five months before the September 30 FCC deadline, there still are a lot of unanswered questions.

On the other hand, we now do know a few things we did not know before.

For example, the re-write of Part 11 and the subsequent re-write of local and state plans by local and state committees does not seem to be an issue with the FCC as far as meeting the September 30 deadline is concerned. The Governor Mandatory CAP alerts called for in the Report and Order will come true on a state-by-state basis as plans are written and submitted to the FCC for approval, so there should be no worries on that account as to the deadline.

EM TRAINING PROPOSED

Further on the positive side, we were reassured that FEMA is working on EAS-CAP training for the emergency management community. That was very, very welcome news.

Since the EM community is not covered by the FCC Rules, there has been and will not be anything in Part 11 that will either rebuild former partnerships with local broadcasters or build new ones where they never existed.

Therefore having EAS training as a part of federal requirements for local emergency management agency reimbursement for declared emergencies will go a long way to unleash the full potential of EAS enhancements. The goal: to better warn a public at risk so they can take timely and proper protective actions to help save lives and protect property. And for this we can be grateful – if it comes to fruition.

Richard Rudman, is a founding member of the [Broadcast Warning Working Group \(BWWG\)](#), a group concerned with promoting a working environment between broadcasters, emergency managers and federal departments. Richard can be reached at rar01@mac.com

[Return to The BDR Menu](#)