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Radio TechCheck

NAB NATIONAL ASSOCIATION OF BROADCASTERS

The Weekly NAB Newsletter for Radio Broadcast Engineers

NAB Files Reply Comments in FCC's EAS Proceeding

On August 4, NAB and a number of parties filed reply comments in the FCC's current EAS proceeding. This *Third Further Notice of Proposed Rulemaking* in EB Docket No. 04-296 was released on May 26, 2011 and posed a number of questions and tentative conclusions about how the Commission should update Part 11 of the Rules to incorporate the introduction of the Common Alerting Protocol (CAP). (See *Radio TechCheck* from June 6, 2011.)

In our reply comments we reiterated our position on a number of issues raised in our comments (see below). NAB also pointed out that there is considerable agreement among many of the parties that filed comments on a number of matters particularly with regard to extending the September 30 CAP compliance deadline. In fact, NAB along with the State Broadcasters Associations representing all fifty States and the District of Columbia, the Broadcast Warning Working Group ("BWWG"), National Cable and Telecommunications Association ("NCTA"), American Cable Association ("ACA"), National Public Radio("NPR"), Association of Public Television Stations ("APTS") and the Public Broadcasting Service ("PBS") filed a Petition for an Expedited Further Extension of the 180-day CAP compliance deadline. This petition, filed on July 29, asked the FCC to quickly consider the deadline extension separate from the other matters in the rule making proceeding.

In our comments July 20, 2011, NAB supported the FCC's transitional approach in which the existing SAME-based EAS is retained for the foreseeable future while a next generation CAP-based EAS is implemented as a parallel mechanism. We urged the Commission to adopt flexible Part 11 rules. For example, the rules should not be over prescriptive by specifying a particular technology for EAS monitoring (such as RSS feeds) but rather, the rules must accommodate continuing technological advances in EAS monitoring methods.

In addition, we stated that the Commission should not require the current CAP capable gear to undergo an FCC equipment certification process but requested that the Commission rely on the EAS equipment conformance testing process already established by the Federal Emergency Management Agency (FEMA), and take into account the fact that CAP-compliant equipment has been available on the market for approximately two years. Many broadcast EAS Participants have already purchased and installed this equipment. NAB stated that any changes to the Part 11 rules should not cause this equipment in the field now to be deemed non-compliant.

With regard to state-level EAS messages, NAB reiterated our concern with the delegation of mandatory EAS activations below the gubernatorial level. We continue to believe that only the governor or his/her single designee, as specified in a Commission-approved State EAS Plan, should be permitted to issue an EAS alert. Granting the power to issue an EAS alert to multiple state officials could lead to unnecessary alerts, public confusion and possibly public desensitization if multiple alerts are triggered for the same event.

Finally, NAB requested that the current September 30, 2011 deadline for when EAS Participants must be able to accept CAP-formatted EAS messages be extended to 180 days following the effective date of the rules adopted in this proceeding. The current deadline will not allow broadcasters sufficient time to consider the rules ultimately adopted in this proceeding in their decisions to identify and purchase EAS equipment that best suits their particular needs. There is also the continuing uncertainty as to whether the Commission will implement its own equipment certification program, separate from FEMA's conformance testing, or whether the Commission may revise any Part 11 rules in a way that requires manufacturers to alter

their design specifications, or perhaps even require EAS Participants already in possession of installed EAS equipment to refurbish their equipment in some way.

NAB comments, reply Comments and the Petition, as well as the submissions of other parties are available on the FCC's Electronic Comment Filing System. Type 04-296 in the search box to view all the submissions in the docket.

FEMA IPAWS to Hold Next Web Event on Nationwide EAS Test

When: August 15, 2011
11:00 a.m. – 1:00 p.m. (EDT)
Where: Microsoft Live Meeting 2007 (Not active until the morning of August 15)

The FEMA Integrated Public Alert and Warning System (IPAWS) office has announced the next EAS Participant Virtual Roundtable: *Are You Ready for the Nationwide EAS Test?*

This virtual roundtable which will include representatives from the Federal Communications Commission (FCC), National Oceanic and Atmospheric Administration (NOAA) and industry will share, build and refine elements of the best practices guide with industry; discuss overall improvements to the system through coordinated State/local and EAS Participant activities; share and discuss an EAS Test public awareness and information toolkit for State, Territorial, and local government and EAS Participants; review the technical process to receive and relay the EAN and conclude with elements of an EAS Test Preparation Checklist.

IPAWS will briefly recap elements of the best practice guide and discuss a variety of topics with virtual roundtable participants, including:

- EAS Receive and Relay Process
- EAS Originator Message Content and Quality
- State and Local EAS Testing
- EAS Equipment Operation and Maintenance
- Nationwide EAS Test Information Toolkit
- EAS Test Preparation Checklist

In order to prepare EAS Participants for the November 9, 2011 Nationwide EAS Test, FEMA IPAWS, the FCC and NOAA are partnering with industry leaders and experts to draft a comprehensive technical best practices guide on end-to-end national EAS message procedures. The guide will be updated incrementally with the EAS community through webinars, roundtables and other activities leading up to the test.

To contribute to the best practices guide? Please visit A National Dialogue on the Emergency Alert System website to vote on ideas and solutions for a variety of EAS discussions. Ideas from the website will be directly discussed in virtual roundtable on August 15. Follow this on Twitter @NationalEASTest for events and information updates.

For more information on the Nationwide EAS Test, please visit the FEMA IPAWS website.

Transmission/Distribution Day at the Radio Show Thursday, September 15, 2011 Chicago, IL

On Thursday, September 15, the Radio Show Engineering Program will feature transmitter facility case studies, maintenance tips and tricks, along with new developments to improve efficiency and save on electrical consumption.

Following traditional transmitter site issues and case studies, the focus will shift to new opportunities and challenges evolving with expanded metadata delivery and multiplatform content distribution. In this segment we will hear from Clear Channel, Emmis, RadioDNS

and the Internet Media Device Alliance.

Consulting engineer Gary Cavell and his team will start the day by looking at the efficiency of a typical radio transmitter plant. All broadcasters are looking for ways to save money. Improvements at the transmitter plant are often overlooked. Purchasing a new high efficiency transmitter is one way to save on electricity costs. If a transmitter is not in the budget, there are other ways of improving the transmission system that can certainly help over time. Cavell, Mertz & Associates developed a transmission system efficiency calculator designed to assist engineers with a variety of "what if" scenarios. The engineering assumptions made by Cavell for the calculator will be explained in detail.

Engineering consultant Steve Lockwood will look at another way to minimize power consumption of AM transmitters. Dynamic carrier control has been around for a very long time; however its use has been primarily limited to high-power shortwave broadcast transmitters. Steve's presentation will address Modulation Dependent Carrier Level Control (MDCL). MDCL systems provide significant reduction in transmitter power consumption. Steve will describe various methods for MDCL and show what is currently available from transmitter manufacturers. MDCL system trials were recently performed in Alaska. The results were impressive and certainly worthy of consideration by all AM broadcasters. But present FCC regulations do not permit this type of operation. Steve will review the environment for regulatory changes that would support MDCL use by U.S. AM broadcasters.

Paul Brenner of Emmis Communications will offer a set of case studies related to data applications for radio. He will show both audio with metadata and data only applications running in a traditional facility. Paul will extend the knowledge he has gained through building the Broadcaster Traffic Consortium. He will explain how a cloud-computing approach to running and supporting advanced applications can be an excellent option for broadcasters.

Jeff Littlejohn from Clear Channel Radio brings the topic "Care and Feeding of Streaming Media" to the Radio Show. Jeff's experience with streaming platforms for Clear Channel stations has resulted in tips and tricks that will be helpful to all radio engineers. He will show how consistency and reliability can be attained for both live and on-demand media targeted to a variety of consumer devices.

Nick Piggot is Head of Creative Technology at Global Radio in the UK. Nick's presentation will cover a new way to integrate traditional broadcast radio with the Internet. It's called Hybrid Radio. Hybrid Radio is part of the open-source RadioDNS project and can be a very cost-effective solution toward providing listeners with multiplatform program related content.

Wrapping up Transmission/Distribution Day will be John Ousby. John represents the Internet Media Device Alliance (IMDA). John's presentation is titled "Radio – Not Just Another App." He will explain ways that IP can offer a non-traditional route to the motor vehicle and extend the relationship of radio beyond terrestrial transmission limits. John will address the opportunities and challenges for IP delivery to the car.

For more details and information, go to the Radio Show website.

Proposals Now Being Accepted for 2012 NAB Broadcast Engineering Conference

Las Vegas Convention Center, Las Vegas, Nevada USA
Conferences April 14 – 19, 2012 // Exhibits April 16 – 19, 2012

The 2012 NAB Show will host the 66th NAB Broadcast Engineering Conference. This world-class conference addresses the most recent developments in broadcast technology and focuses on the opportunities and challenges that face broadcast engineering professionals around the world. Each year hundreds of broadcast professionals attend the conference. They include practicing broadcast engineers and technicians, engineering

consultants, contract engineers, broadcast equipment manufacturers, distributors, R&D engineers plus anyone specifically interested in the latest broadcast technologies.

If you feel qualified to speak at the NAB Broadcast Engineering Conference, we invite you to submit a technical paper proposal. The deadline for submitting your proposal is October 21. If you have any questions, contact John Marino, vice president, NAB Science and Technology at 202 429 5346.