In the Matter of

Equipment and Operational Issues
Identified Following the First Nationwide Test of the Emergency Alert System

EB Docket No. 04-296

COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS

NATIONAL ASSOCIATION OF BROADCASTERS
1771 N Street N.W.
Washington, D.C. 20036
(202) 429-5430

Kelly Williams
NAB Technology

Jane E. Mago
Jerianne Timmerman
Ann West Bobeck
Larry Walke

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# Executive Summary
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EXECUTIVE SUMMARY

As the backbone of the Emergency Alert System (EAS), America’s broadcasters fully support nationwide testing of the EAS. The National Association of Broadcasters (NAB) worked closely with the Commission and the Federal Emergency Management Agency to ensure that the first such test, conducted on November 9, 2011, was useful and informative. In response to the FCC’s request for input on next steps following the nationwide test, we agree with the Commission that the nationwide EAS test demonstrated that the EAS is fundamentally sound. NAB also agrees that the test successfully achieved its goal of allowing stakeholders to identify any aspects of the system needing improvement.

To guide resolution of the technical and operational issues that arose during the test, NAB respectfully urges the Commission to focus on collaboration with industry and reaching technical consensus, rather than imposing one-size fits-all regulations. There are several organizations that provide an excellent model for such an approach, including the EAS-CAP Industry Group (ECIG), which crafted recommendations for the EAS transition to a Common Alerting Protocol (CAP), and the Communications Security, Reliability, and Interoperability Council (CSRIC), a federal advisory group consisting of stakeholders from both the private and public sectors, which provides guidance regarding the resiliency of the nation’s communications systems. NAB supports using these kinds of forums to address concerns about the EAS identified by the nationwide test, and to develop practical solutions that work for all EAS participants.

The question whether the Commission should implement “minimum specifications” to encourage uniformity for EAS text crawls is especially well-suited for consideration in such a collaborative venue, outside the scope of a traditional
rulemaking process. Because broadcast stations receive emergency information from numerous sources and present that information in different ways, the FCC should encourage flexibility and a range of solutions to ensure that all emergency information reaches the broadest possible audience, rather than narrowly focusing on mandated displays of EAS messages. Collaboration with all relevant stakeholders would be the preferable way to address these issues, and broadcasters look forward to participating in such an effort.

Finally, the forced interruption of broadcasters’ emergency programming by cable system EAS alerts is a critical technical issue that is ripe for renewed consideration. Existing rules allow cable systems to unilaterally disrupt the vital public safety announcements and in-depth coverage of dangerous weather and other emergencies that local television stations provide, as well as AMBER Alerts. As NAB has repeatedly informed the Commission, cable operators can effectively address this problem by implementing “selective override” so that certain channels, including local television stations, can be selectively omitted during a cable system’s interruption. We understand that the technology exists today to enable selective overrides, at practically no cost to cable operators. NAB asks the Commission to consider this problem as part of any rulemaking that follows the current inquiry.
In the Matter of

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The Federal Communications Commission (FCC or Commission) and the Federal Emergency Management Agency (FEMA) conducted the first-ever nationwide test of the Emergency Alert System (EAS) on November 9, 2011. The Commission now seeks input on steps to address certain technical and operational issues that arose during the test, including the development of a rulemaking notice in the above-captioned proceeding.¹

In these comments responding to the FCC’s request, the National Association of Broadcasters (NAB)² urges the Commission to focus on industry collaboration to guide resolution of many of the technical issues raised in the Notice, particularly the formatting of EAS visual crawls. In light of recent technological advances, we also strongly urge

² NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and also broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.
the Commission to include in this proceeding a reexamination of its rules permitting cable systems to override broadcast television programming during emergencies.

I.  **As the Backbone of EAS, Broadcasters Support Nationwide EAS Testing**

Local broadcasters are the backbone of the nation’s EAS system. Given their ability to reach virtually all Americans – especially when other communications platforms fail – radio and television stations play an indispensable role in the distribution of public alerts and warnings. EAS enables the President to communicate with the public during emergencies, and is also an important public alerting tool of state and local governments. These warnings often include weather alerts issued by the National Weather Service (NWS), AMBER alerts and critical disaster information such as notices to evacuate or shelter-in-place instructions. Together with live, on-the-scene, comprehensive news coverage, a reliable EAS system is a vital component of broadcasters’ efforts to keep their audiences and communities safe.

Broadcasters supported the first nationwide EAS test in 2011. The industry worked closely with both federal and local officials to ensure that the national test was useful and informative. Broadcasters prepared for the national exercise by reviewing their internal EAS equipment and processes, and if appropriate, upgrading software or hardware in advance of the national test, at their own expense. Broadcasters also conducted an extensive, voluntary nationwide awareness campaign in the days leading up to the test, to ensure that Americans understood the nature of the nationwide

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3 America’s Missing: Broadcasting Emergency Response Alerts, or Child Abduction AMBER Alerts, expand the eyes and ears of local law enforcement when a child is abducted. Since the inception of AMBER in 1996, AMBER alerts have helped safely recover more than 656 abducted children nationwide. See [http://www.amberalert.gov/statistics.htm](http://www.amberalert.gov/statistics.htm) (last visited Oct. 29, 2013). Broadcasters originally created the Amber Plan with the assistance of law enforcement agencies in the Dallas/Fort Worth area.
exercise. For example, numerous national and local television newscasts and morning shows, as well as radio talk shows, discussed the test. Broadcasters additionally created and distributed a variety of Public Service Announcements that were aired thousands of times as the test approached. EAS Test Report at 10.

NAB agrees with the Commission that the nationwide EAS test demonstrated that the EAS system is fundamentally sound. Id. at 5. An “overwhelming majority” of broadcasters were able to successfully monitor and receive the Emergency Action Notification (EAN), the live code used in the test, and retransmit the EAN to other participants in the test, or rebroadcast it to the public, as appropriate. Id. at 11. We also agree that the test achieved its purpose of allowing all stakeholders to assess the EAS system’s nationwide architecture, identify those aspects of the system needing improvement (such as audio quality issues and certain anomalies in EAS equipment operation), and take corrective steps to improve system reliability. Id. at 5.

NAB takes this opportunity to applaud the Commission’s establishment of an online system for EAS Participants to report on their participation in the nationwide EAS test. 47 C.F.R. § 11.61(a)(3)(iv). The reporting system was intended to provide an accurate picture of the distribution of the test EAN message. The Commission designed the system to be minimally burdensome, and appropriately permitted participants to complete certain identifying portions of the form before the test to

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5 See
facilitate completion and submission of the form. NAB supported the online reporting system by encouraging and reminding stations to promptly file their reports.

NAB respectfully offers one suggestion for future EAS test reporting. Many broadcasters observed that the online process for the first nationwide test did not provide any verification that a participant had successfully completed and submitted its report. This confused some broadcasters who thought they had filed their test report, only to find out later they had not done so successfully. We propose that a receipt for filing be incorporated in the online reporting system for future nationwide EAS testing.

II. The Commission Should Focus on Industry Collaboration to Resolve the Technical and Operational Issues Raised in the Notice

As America’s “First Informers” during emergencies, broadcasters support the Commission’s goal of improving access to emergency information. The nationwide EAS test revealed certain shortcomings in the national public warning system, and we appreciate the Commission’s current efforts to refine the system. Because the broadcast facility ecosystem is extremely diverse, many of the technical issues raised in the Notice require practical and, above all, flexible solutions. Imposing a one-size-fits-all regulatory regime for emergency alerting would be counterproductive. Instead, the Commission should focus on collaborating with all stakeholders to ensure the soundness of EAS, as the public alerting system continues to evolve.

One excellent model for this approach is the government’s engagement with the EAS-CAP Industry Group (ECIG), a coalition of EAS equipment, software and service providers. In 2009-2010, ECIG crafted recommendations to ensure consistency across all devices in how EAS Participants decode messages formatted in the Common

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Alerting Protocol (CAP). ECIG proposed a CAP Implementation Guide, solicited public comment on its recommendations, and ultimately released a final guide that was approved by FEMA.\(^7\)

The Commission adapted its rules to conform to the ECIG Implementation Guide in several respects. For instance, the Commission required EAS Participants to convert and process CAP-formatted EAS messages in accordance with the ECIG Implementation Guide to harmonize certain CAP elements with Part 11 rules.\(^8\) The Commission also adopted ECIG’s recommendations regarding visual crawl translation and other elements of the CAP transition. Fifth Report and Order, 27 FCC Rcd at 691, 704. This process could serve as a model for Commission action on those technical issues identified in the Notice.

The Commission also has rechartered the Communications Security, Reliability, and Interoperability Council (CSRIC) for a fourth term.\(^9\) This federal advisory group, consisting of interested parties from both the private and public sector, will provide guidance, expertise and recommendations to the Commission regarding the resiliency of the nation’s communications system. The tasks assigned to the most recent CSRIC include the consideration of actions the Commission should take to improve the EAS,


including an examination of operational issues that arose during the nationwide EAS test.\textsuperscript{10} CSRIC and its working groups offer the Commission another avenue for leveraging a public-private partnership to address the concerns raised in the Notice.

Finally, legislation has been proposed in the U.S. House of Representatives that will reauthorize FEMA’s Integrated Public Alert and Warning System (IPAWS).\textsuperscript{11} In addition to reauthorizing this vital program and facilitating coordination among federal, state and local emergency managers, the proposed legislation establishes an IPAWS Advisory Committee that would consist of representatives from FEMA, the Commission and other federal agencies, as well as state and local emergency management agencies. This committee also will enlist private individuals with the requisite technical knowledge and expertise to inform the Committee’s work, including representatives of communications services providers, broadcasters, equipment manufacturers, and all relevant industries that participate in public warning. Such a committee would represent another government-industry forum for working through public alerting and warning issues in a cooperative manner.

NAB strongly supports utilizing these various forums to address shortcomings in the EAS identified by the nationwide test and to develop practical solutions that work for all diverse EAS Participants, including the wide variety of radio and television broadcasters.

escriptions_%2009122013.pdf.

\textsuperscript{11} FEMA Reauthorization Act of 2013, H.R. 3300, introduced by Representative William Shuster, Chairman, Committee on Transportation and Infrastructure (Oct. 22, 2013).
III. The Format of EAS Visual Crawls is Particularly Well-Suited to Consideration by a Public-Private Partnership

The Public Notice asks whether the FCC should implement “minimum specifications” to encourage uniformity of “language, type size, font, or crawl speed” for EAS text crawls. Notice at 9-10. Addressing this issue would provide a good opportunity for the Commission to utilize collaborative forums such as ECIG, CSRIC, or the IPAWS Advisory Committee described above, outside the scope of a traditional rulemaking process.

Local broadcasters have successfully partnered with state and local emergency management agencies, NWS, FEMA, and the FCC for decades to provide timely alerts and warnings. It would be wholly impractical and likely counterproductive for the Commission to now propose formal rules governing precisely how that information is visually conveyed via EAS.

For example, with the advent of the Common Alerting Protocol (CAP), stations are now required to convert CAP-formatted EAS messages into SAME-compliant messages in accordance with the ECIG Implementation Guide.12 Many states and localities, however, have not yet fully deployed CAP-based alerting capabilities. Thus, depending on the origin and type of textual information delivered via an EAS box, a station may opt to reformat that information before displaying it to the public. NAB encourages the Commission to refrain from placing language, size, font or similar requirements on video distributors, including television broadcasters, which may have

12 47 C.F.R. § 11.56. “SAME” refers to Specific Area Message Encoding, which is the protocol used to encode EAS messages in the U.S. and Canada.
the unintended consequence of delaying emergency transmissions to the public or even reducing the total amount of information transmitted.

In addition, many television stations receive emergency information from a multitude of sources, including their EAS encoder/decoders, their state emergency operations centers, and/or through their own news operations, including live video feeds. Stations may present relevant emergency information orally, graphically and/or textually on a television screen in lieu of, or in addition to, activating the EAS. A station may provide live continuous coverage of a significant weather event, such as Superstorm Sandy, and opt not to broadcast a state or local EAS alert (but utilize the relevant information from an EAS source) because all viewers are already likely watching the station for up-to-the minute information. For emergencies such as flash floods or tornado warnings, a station instead may interrupt regularly scheduled programming or provide coverage during newscasts. Depending on the circumstances, displayed or crawled emergency information may be generated using graphics equipment located in a station’s news room, master control, or weather center, or such information may originate directly from the station’s EAS equipment. Given these numerous sources from which stations receive emergency information, and the different ways stations present that information, the imposition of requirements for uniform visual presentation of EAS crawls is likely not an effective way to improve public warning overall.

Moreover, how well a consumer can see and read onscreen crawls and graphics depends on a number of factors including, but not limited to, the size and type of TV set (e.g., text on an old analog set is more difficult to read), the viewing environment (i.e.,
how far the viewer is from the set, room lighting, etc.) and, of course, the visual acuity of the viewer. Realizing this variability, the Commission requires closed captioning decoders and receiving equipment to have flexible technical capabilities, including presentation, character color, opacity, character size, font, and background color that give a viewer various options for viewing information. See, e.g., 47 C.F.R. §§ 79.101-103. It seems inconsistent for the Commission to require flexibility of user interface for one type of information (non-EAS conveyed information), while considering imposition of uniform “minimum specifications” or mandates for EAS crawls. Notice at 10.

Nor do “minimum specifications” take into account the highly choreographed workflow that stations must undertake in the visual placement of emergency information, through captioning, texts and graphics (and ensuring they do not overlap). The nearly 1,800 full power television broadcast facilities are differently configured, and the hardware and software in their broadcast plants are far from standardized. Stations range from stand-alone operations with one channel output to multichannel facilities, central casting, and station groups with hub operations, among other configurations.

Additionally, all television stations are preparing to upgrade their facilities pursuant to the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA) and the provisions governing accessibility of emergency information for persons that are blind or have visual disabilities.13 Currently, an integrated solution for creating the audio representation of an emergency crawl does not exist. To comply with

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this new emergency information requirement by May 26, 2015, stations must be able to convert emergency crawl graphics into audio, route that audio through their facilities and encode that audio onto a secondary audio stream for transmission over the air. It is important to recognize that in hardware and software design, EAS equipment for current and Next-Generation alerting will likely be an input source for some stations’ emergency information. Such EAS equipment has not even been developed at this time. Layering uniform standards for EAS crawls thus becomes particularly challenging from a technical standpoint in light of compliance with the new CVAA requirements.

Rather than propose a one-size fits all solution that narrowly focuses on the display of EAS messages, including any upcoming nationwide EAS testing, the Commission should encourage flexibility and a range of solutions to ensure all emergency information reaches the broadest possible audience. Broadcasters look forward to collaborating with all relevant stakeholders to consider how best to ensure that alerts and emergency communications are fully accessible to broadcast television viewers.

**IV. Cable Overrides Should Be Addressed in This Proceeding**

Finally, a critical technical issue ripe for renewed consideration is the forced interruption of broadcasters’ emergency programming by cable system EAS alerts. Since 1993, NAB has repeatedly asked the Commission to modify its EAS regulations so that local viewers can maintain access to the timely and comprehensive information

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local television stations air during emergencies. As observed during the nationwide EAS test, when an emergency alert is initiated, cable headends send data to cable set top boxes (STBs) that cause the STBs to override broadcast programming by force-tuning the boxes to another channel where a short emergency message slide or crawl is displayed. This automatically generated “blue screen with text” offered by most cable operators interrupts viewers’ access to the detailed emergency information provided by local television stations.

Broadcasters’ live coverage can include tracking of tornados, hurricanes, floods, icing conditions, wild fires, and other emergency weather conditions. Forced tuning by cable operators also disrupts critical public safety announcements, such as shelter-in-place or evacuation instructions, the status of power failures, industrial explosions, or bridge collapses.

For instance, on Monday, March 18, 2013, NewsChannel 5 in Nashville, Tennessee, was airing detailed, up-to-the-minute coverage on the path of a tornado with winds of 105 mph when viewers watching on Comcast were automatically force tuned to a black slide with the following text: “Emergency Alert System, following counties, National Weather Service Issued a Tornado Warning.” This followed a disruption on Saturday, March 16, 2013, when viewers with Comcast STBs were forced tuned to another black slide, even though there was no tornado warning at the time. In this case, the Comcast STBs locked up for approximately twenty minutes. When Comcast customers called to complain about the disruption, Comcast representatives placed the blame on the local television station.¹⁶

Cable overrides also hinder the timely delivery of AMBER Alerts. According to the National Center for Missing & Exploited Children, which administers the AMBER Plan, force-tuning or cable override is not an effective option for receiving emergency information:

“Our work with the AMBER Alert system has made us well aware of the challenges with cable over-ride, whereby viewers’ TV screens have been interrupted with a blue slate and a crawl that states the existence of an emergency but fails to describe the type of emergency or where to go for further details. This has confused and distressed many viewers as to what to do in these situations. Lack of information has been a problem with cable-overrides. Moreover, overrides frighten people. In light of these concerns, this provision [permitting cable overrides] should be

¹⁶ Some cable systems also “locked-up” during the nationwide EAS test, delaying return to the television station being watched before the test. Tom Plahutnik, Web Editor/Producer, Did your cable lock up after the EAS test? Here’s how to fix it, WNEM.com (posted Nov. 9, 2011), available at http://www.wnem.com/story/15998738/did-your-cable-lock-up-after-the-eas-test-heres-how-to-fix-it.
eliminated, or alternatively, broadcasters should retain the right to selective override . . .”17

NAB could not agree more. At best, cable overrides cause confusion; at worst, they increase risk to viewers by depriving them of timely, detailed emergency information. Cable overrides undermine the goal of the EAS system to empower citizens with accurate, up-to-the-minute information during emergencies.

NAB has asked the Commission to address this problem by amending its rules to require local cable operators to implement “selective override” so that certain channels can be selectively omitted during a cable system’s EAS interruption. Current rules allow broadcasters to negotiate with cable operators to implement selective override for local broadcast channels.18 To date, however, the Commission has not mandated “selective override” of broadcast stations,19 which has created concerns for cable viewers. Before the DTV transition, many broadcasters were able to negotiate selective override agreements on local cable operators’ analog tier. Very few broadcasters, however, have been able to do so following the transition because, according to cable operators, limitations in digital cable equipment make selective override impossible or cost-prohibitive.

NAB disagrees. In fact, we understand that the cost of implementing selective override in a digital cable facility is practically zero and that the equipment needed to implement selective override may already be in place. In 2002, the American National Standards Institute (ANSI) adopted a cable industry standard that specifies the inclusion

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17 Comments of the National Center for Missing & Exploited Children, EB Docket No. 04-296 (filed Oct. 29, 2004), at 10.
18 47 C.F.R. §§ 11.51(g)(4) and (h)(4).
of “selective override” functionality in cable equipment. Presumably, cable STBs and head end equipment include this capability by now, thereby defeating any technology limitations perceived in the past. Nonetheless, many cable operators have been reluctant to agree not to override, and many digital cable viewers continue to be deprived of critical emergency information.

The time is right for action, as the Commission considers its next steps following the national EAS Test Report. Cable overrides compromise the effectiveness of broadcasters’ emergency programming, and they should be fully explored in any rulemaking that follows this Public Notice.

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20 See American National Standards Institute, (ANSI) J-STD-042-2007; Emergency Alert Messaging for Cable (2007) at § 5 and § 7.4 (specifying the protocol for conveying to an STB a list of services (channels), called exception services, for which an emergency alert event shall not apply). See also id., note in § 8.3 (which specifically acknowledges that terrestrial broadcast channels provide emergency alert functions and that those channels can be identified so that the cable alerts do not apply when STBs are tuned to those channels).

21 The Commission moreover should consider harmonizing override requirements among multichannel video programming distributors. When revising its Part 11 rules in 2006 to require DBS participation in the EAS, the FCC made explicit that DBS providers are required to pass through all EAS messages carried on local television broadcast stations. See 47 C.F.R. § 11.55(a)(1). The FCC should similarly ensure that all EAS and live emergency information is passed through on cable platforms.
V. Conclusion

For the reasons stated above, NAB respectfully asks that the Commission focus primarily on collaboration with industry and reaching technical consensus to address the issues identified in the Notice.

Respectfully submitted,

[Signature]

Jane E. Mago
Jerianne Timmerman
Ann West Bobeck
Larry Walke

Kelly Williams
NAB Technology

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