Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Review of the Emergency Alert System;	)	EB Docket No. 04-296
	)	
Independent Spanish Broadcasters Association, the Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council, Petition for Immediate Relief	)	
	)	
Randy Gehman Petition for Rulemaking	)	

THIRD FURTHER NOTICE OF PROPOSED RULEMAKING

Adopted: May 25, 2011 **Released: May 26, 2011**

Comment Date: **[30 days after date of publication in the Federal Register]**
Reply Comment Date: **[45 days after date of publication in the Federal Register]**

By the Commission: Commissioner Baker not participating.

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I. INTRODUCTION AND SUMMARY

1. In this *Third Further Notice of Proposed Rulemaking*, we seek comment on proposed changes to our Part 11 rules governing the Emergency Alert System (EAS) to codify the obligation to process alert messages formatted in the Common Alerting Protocol (CAP)[1] and to streamline and clarify these rules generally to enhance their effectiveness.

2. In 2007, as an initial step towards upgrading the EAS to incorporate the latest technologies and capabilities and to facilitate integration of public alerting at the national, state, and local levels, the Commission adopted the *Second Report and Order* in this docket, which, as explained below, incorporated certain CAP-related obligations into the Commission's Part 11 EAS rules.[2] This *Third Further Notice of Proposed Rulemaking* builds on that effort by seeking comment on a wide range of tentative conclusions and proposed revisions to the Part 11 rules that would codify the CAP-related mandates adopted in the *Second Report and Order*. These proposed revisions seek to integrate CAP-based alert messaging into the existing EAS while laying the foundation for transitioning to next generation alert mechanisms. We also seek comment on several proposed rule revisions unrelated to CAP that are designed to modernize and streamline the Part 11 rules by eliminating outdated technical and procedural requirements, and more generally, improve the overall effectiveness of the EAS.[3] Among other things, in this *Third Further Notice of Proposed Rulemaking* we seek comment on and render tentative conclusions in the following areas:

Scope of Part 11 Revision:

- We tentatively conclude, with respect to the CAP-related obligations addressed in this item, that our focus should be on ensuring that CAP-formatted alert messages entered into the EAS are converted into and processed in the same way as messages formatted in the EAS Protocol.[4]

[1] *See* 47 C.F.R. § 11.56. *See infra* paras. 11-14 for a description of CAP.

[2] *See* Review of the Emergency Alert System; Independent Spanish Broadcasters Association, The Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council, Petition for Immediate Relief, *Second Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 13275 (2007) (alternatively, "*Second Report and Order*" and "*Next Generation EAS FNPRM*").

[3] In a separate proceeding we have adopted an order setting technical parameters for a nationwide test of EAS. *See* Review of the Emergency Alert System, *Third Report and Order*, FCC 11-12, 76 Fed. Reg. 12,600 (March 8, 2011) (*National Test Order*). In addition, later in 2011, we intend to release a Notice of Inquiry on Broadband Alerting to initiate a comprehensive examination of the potential for broadband technologies to enhance alerts and warnings.

[4] *See infra* paras. 27-28. As indicated, we intend to release a Notice of Inquiry on Broadband Alerting later in 2011 to initiate a comprehensive examination of the potential for broadband technologies to enhance alert and warning systems.

Obligation to Accept CAP Messages:

- We tentatively conclude that the Commission should revise the Part 11 rules to make clear that EAS Participants must be able to convert CAP-formatted EAS messages into EAS Protocol-compliant EAS messages in accordance with the ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0 (May 17, 2010).[5]
- We tentatively conclude that the Commission should amend the Part 11 rules to require that EAS Participants monitor the Really Simple Syndication 2.0 feed(s) utilized by: (i) FEMA's Integrated Public Alert and Warning System for federal CAP-formatted messages; and (ii) state alert systems as the source of governor-originated CAP messages (provided these are described in the State Area EAS Plan submitted to and approved by the Commission).[6]
- We seek comment on whether we should permit EAS Participants to meet their CAP-related obligations by deploying intermediary devices that convert CAP-formatted messages into EAS Protocol-formatted messages for transmission over the EAS Participants' transmission platforms.[7]

EAS Equipment Certification:

- We seek comment on whether and how the Commission should incorporate compliance with CAP functionality into its existing certification scheme, including how the Commission should implement conformance testing related to the proper translation of CAP-formatted messages into EAS Protocol-compliant messages and what requirements the Commission should adopt for modified EAS equipment.[8]
- We seek comment on whether the Commission should classify intermediary devices as stand-alone devices subject to the same certification r equirements as stand-alone decoders and encoders.[9]

180-Day CAP Reception Deadline:

- We seek comment on whether the current September 30, 2011, deadline for CAP-compliance is sufficient or whether the Commission should extend or modify it so it is triggered by some action other than FEMA's adoption of CAP, such as implementation by the Commission of revised certification rules.[10]

CAP Messages Originated by State Governors:

- We tentatively conclude that the obligation of EAS Participants to receive and transmit CAP-formatted messages initiated by state governors only applies to the extent that state governors have formatted such CAP messages using FEMA's standards for federal CAP messages.[11]

[5] *See infra* para. 35.

[6] *See infra* paras. 38, 40.

[7] *See infra* para. 46.

[8] *See infra* paras. 94-103, 105-108.

[9] *See infra* para. 104.

[10] *See infra* paras. 109-111.

[11] *See infra* para. 116.

- We seek comment on any rule revisions needed to fully implement the obligation to process CAP-formatted messages initiated by state governors, including whether the Commission must adopt a new origination and/or event code and whether the obligation should extend to governors of any adjacent states in which the EAS Participant provides service.[12]
- We tentatively conclude that we should define the geo-targeting element of mandated gubernatorial alerts in Part 11 in the same way as we define the location provisions in the current EAS Protocol.[13]

Revising the Procedures for Processing Emergency Action Notifications (EANs):

- We seek comment on whether the Commission should substantially simplify procedures for processing EANs set forth in section 11.54 and related Part 11 rule sections so that EAS Participants process EANs like any other EAS message, only on a mandatory and priority basis. We also seek comment on whether the Commission should:
  - eliminate the Emergency Action Termination event code and replace it where necessary with the End Of Message code in the Part 11 rules;[14]
  - delete sections 11.16, 11.42, 11.44, and 11.54(a), (b)(1)-(8), (10), (12), and 11.54(c) of the rules;[15] and
  - eliminate the EAS Operating Handbook and instead require EAS Participants to maintain within their facilities a copy of the current FCC-filed and approved versions of the State and Local Area EAS Plans.[16]

Miscellaneous Part 11 Revisions Not Related to CAP:

- We seek comment on whether the Commission can delete some or all of the current provisions relating to the Attention Signal in sections 11.32(9) and 11.33(b) of the rules and instead apply the minimal standard currently set forth in section 11.31(a)(2) or whether we should delete the Attention Signal from the Part 11 rules altogether.[17]
- We seek comment on whether the introduction of CAP to the existing technical framework of the EAS can improve access to emergency information to persons with disabilities.[18]

II. BACKGROUND

3. Congress established the Commission for the purposes of, among other things, the national defense and the promotion of safety of life and property through the regulation of wire and radio communications networks.[19] For nearly fifty years, the Commission has implemented an essential

[12] *See infra* paras. 119-124.

[13] *See infra* para. 126.

[14] *See infra* para. 147.

[15] *See infra* paras. 167, 151, 162-163, 149 and 157-158, respectively.

[16] *See infra* paras. 154-155.

[17] *See infra* paras. 178-180.

[18] *See infra* paras. 189-195.

[19] *See* Section 1 of the Communications Act of 1934 (as amended) (the "Act"), 47 U.S.C § 151.

element of this mandate by affording the American public effective national alert and warning systems.[20] In developing and implementing these systems, the Commission has worked with federal partners and in coordination with state and local stakeholders. The current system, the EAS, is a national public warning system designed to provide the President and heads of state and local governments with the ability to issue alerts to the general public, on a national, state, or local area basis, over broadcast TV and radio, cable, satellite, and other audio and video distribution platforms.[21] Although the EAS was initially designed to provide the President with the ability to communicate rapidly with the American public via radio and TV broadcast networks during a national crisis, a Presidential alert has never been sent over the EAS.[22] The EAS network, however, has been and continues to be used extensively for state, local, and weather–related emergencies.[23]

[20] In addition to Section 151 of the Act, the Commission also has authority to regulate participation in the EAS under Sections 4(i) and (o), 303(r), and 706 of the Act, 47 U.S.C. §§ 154(i) and (o), 303(r), 606.

[21] An overview of the history of EAS is set out in the first Notice of Proposed Rulemaking in this docket. *See* Review of the Emergency Alert System, EB Docket No. 04-296, *Notice of Proposed Rulemaking*, 19 FCC Rcd 15775, 15776-77, paras. 6-8. An overview of the present organization and functioning of the EAS system is set out in the *Second Report and Order*. *See Second Report and Order*, 22 FCC Rcd 13275, 13280-83, paras. 11-14.

[22] *See Second Report and Order*, 22 FCC Rcd 13275, 13282-83, para. 14. Under the Part 11 rules, national activation of the EAS for a Presidential alert message with the Emergency Action Notification (EAN) event code is designed to provide the President the capability to transmit an alert message (in particular, an audio alert message) to the American public within ten minutes from any location at any time and must take priority over any other alert message and preempt other alert messages in progress. *See*, *e.g.*, Review of the Emergency Alert System, *First Report and Order and Further Notice of Proposed Rule Making*, 20 FCC Rcd 18625, 18628, para. 8 (2005) (*First Report and Order*). *See also* 47 C.F.R. § 11.44(a). Although an actual Presidential alert has never been sent over the EAS, on January 6, 2010, FEMA and the FCC, along with State of Alaska officials and the Alaska Broadcasters Association, conducted a live code test of the Presidential alert and warning capabilities of the EAS in the State of Alaska. *See* "Federal And State Partners To Test National Emergency Alert System In Alaska," *available at* http://www.fema.gov/news/newsrelease.fema?id=50157. A follow-up state-wide test of the EAS in Alaska was conducted on January 26, 2011. *See* FEMA, "Emergency Alert System Test Concludes In Alaska," Release Number: HQ-11-004 (Jan. 27, 2011), *available at* http://www.fema.gov/news/newsrelease.fema?id=53591. As indicated, we adopted the *National Test Order* in February 2011, which revised the Part 11 rules to facilitate a nationwide test of the EAS. *See supra* note 3.

[23] Use of the EAS by state or local governments to initiate warnings and the broadcast and transmission of other-than-Presidential alerts is voluntary, except, as discussed in Section III.E of this item, for EAS messages initiated by state governors that are formatted in CAP and delivered pursuant to procedures set forth in State Area EAS Plans that have been approved by the Commission. *See* 47 C.F.R. § 11.55(a); *see also Second Report and Order*, 22 FCC Rcd at 13300, para. 55. Several thousand state and local EAS messages are transmitted annually, more than 70 percent of which are vital weather-related alerts (such as flash flood, hurricane, and tornado warnings) originated by the National Weather Service (NWS) via the NOAA Weather Radio (NWR) network, which spans the U.S., Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. *See Second Report and Order*, 22 FCC Rcd 13275, 13282-83, para. 14 (*citations omitted*).

A. EAS Components

4. *EAS Oversight*. The Commission, in conjunction with the Federal Emergency Management Agency (FEMA)[24] and the National Weather Service (NWS),[25] implements EAS at the federal level.[26] In addition, State Emergency Coordination Committees (SECC) and Local Emergency Coordination Committees (LECC) develop State and Local Area EAS Plans.[27]

5. *EAS Architecture*. The present-day EAS is a hierarchical alert message distribution system that utilizes radio and television broadcasters, cable service providers, and other regulated entities (collectively known as "EAS Participants")[28] to transmit audio and/or visual emergency alert messages to the public. To initiate an EAS message, whether at the national, state, or local levels, the message originator must format a message in the EAS Protocol,[29] which is identical to the Specific Area Message Encoding (SAME) digital protocol utilized by NWS[30] (hereinafter, "EAS Protocol" and "SAME" are used interchangeably), and send the formatted alert to a designated entry point within the EAS network for

[24] Authority to activate the national-level EAS rests solely with the President. This authority has been delegated to DHS's Undersecretary for Emergency Preparedness and Response as director of FEMA. FEMA acts as the White House's executive agent for the development, operations, and maintenance of the national level EAS and is responsible for implementation of the national level activation of EAS, tests, and exercises. *See*, *e.g.*, *First Report and Order*, 20 FCC Rcd 18628, para. 6.

[25] Working with other federal agencies and EAS, NWS utilizes an all-hazards radio network that broadcasts warnings and post-event information for all types of hazards, including weather, natural, technological, and national emergencies. *See* <http://www.nws.noaa.gov/nwr/allhazard.htm>. *See also Second Report and Order*, 22 FCC Rcd 13275, 13282-83, para. 14.

[26] The respective roles of the Commission, FEMA, and NWS are defined in a series of Executive documents. *See* 1981 State and Local Emergency Broadcasting System (EBS) Memorandum of Understanding Among the Federal Emergency Management Agency (FEMA), Federal Communications Commission (FCC), the National Oceanic and Atmospheric Administration (NOAA), and the National Industry Advisory Committee (NIAC) *reprinted as* Appendix K to Partnership for Public Warning Report 2004-1, The Emergency Alert System (EAS): An Assessment; Assignment of National Security and Emergency Preparedness Telecommunications Functions, Exec. Order No. 12472, 49 Fed. Reg. 13471 (1984); and *Memorandum,* Presidential Communications with the General Public During Periods of National Emergency*,* The White House (Sept. 15, 1995) (*1995 Presidential Statement*).

[27] *See* Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System, *Report and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 1786, 1834-36, paras. 131-35 (1994) (*1994 Report and Order*) (subsequent history omitted).

[28] The Commission's rules currently define EAS Participants as "analog radio broadcast stations; digital audio broadcasting stations; analog television broadcast stations; digital television broadcast stations; analog and digital cable systems; wireline video systems; wireless cable systems; direct broadcast satellite (DBS) service providers; and digital audio radio service (SDARS) providers. *See* 47 C.F.R. § 11.11(a). *See infra* para. 63, where we seek comment on revising this definition to delete the obsolete reference to "analog television broadcast stations."

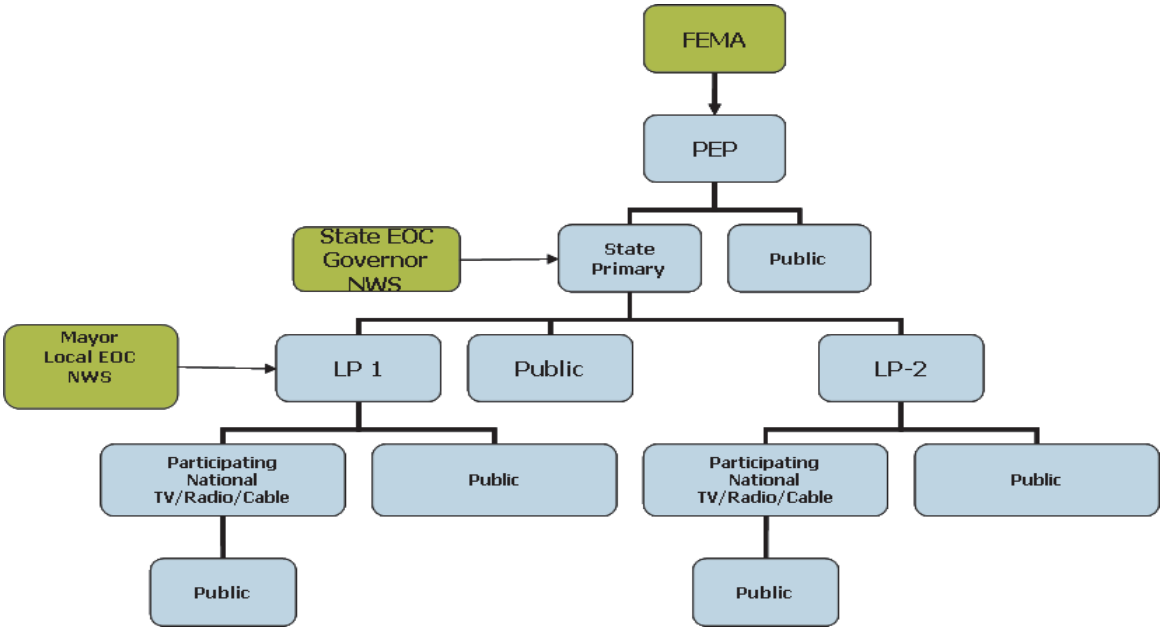
[29] *See* 47 C.F.R. § 11.31. Under this protocol, an EAS alert uses a four-part message: (1) preamble and EAS header codes (these codes contain information regarding the identity of the sender, the type of emergency, its location, and the valid time period of the alert); (2) audio attention signal; (3) message; and (4) preamble and "end of message" (EOM) codes. *See id*. § 11.31(a). Although the EAS Protocol specifies that the message can be audio, video, or text, in practice, only audio is sent.

[30] *See* NOAA Weather Radio SAME Info, http://www.nws.noaa.gov/nwr/nwrsame.htm; Specific Area Message Encoding (SAME), National Weather Service Instruction 10-1712 (Feb. 12, 2007), *available at* http://www.nws.noaa.gov/directives/010/pd01017012b.pdf.

delivery to specialized equipment maintained and operated by EAS Participants that can receive (and decode) the alert for transmission over the EAS Participants' facilities to their end users.

6. The distribution processes for national level alerts and state/local level alerts differ slightly. At the national level, EAS message distribution starts at Primary Entry Point (PEP) stations, which are designated by FEMA and tasked with receiving and transmitting "Presidential Level" messages initiated by FEMA.[31] Although PEP stations will soon be able to reach more than 90 percent of the U.S. population, the EAS requires designated "State Primary" (SP) stations to monitor designated PEP stations for the national level alert[32] and then retransmit the national alert to Local Primary (LP) stations, which in turn are monitored by all other EAS Participants (radio and television broadcasters, cable service providers, etc.).[33] This process of relaying EAS messages from station-to-station is often referred to as the "daisy chain." A functional diagram of the national EAS architecture is contained in Figure 1, below:

Figure 1: National EAS Alert Distribution Architecture



[31] *See* 47 C.F.R. § 11.2(a). As the entry point for national level EAS messages, PEP stations are designated as "National Primary" (NP) stations. *See id*. §§ 11.2(f), 11.18(a). FEMA has indicated that it intends to increase the number of PEP stations from the original 34 to more than 80 stations, thus expanding coverage of the nation's population from approximately 67 percent (in 2009) to over 90 percent when these additional stations become operational. *See* FEMA, "EAS Modernization and Expansion Project" (Jan. 14, 2011), *available at* https://www.fema.gov/emergency/ipaws/projects.shtm.

[32] A PEP station can serve more than one role; for example, it can also serve as an SP station.

[33] At present, the United States is divided into approximately 550 EAS local areas, each of which contains at least two Local Primary stations, designated "Local Primary One" (LP1) and "Local Primary Two" (LP2). The LP stations must monitor at least two EAS sources for Presidential messages (including State Primary stations and in some cases a regional PEP station) and can also serve as the point of contact for state and local authorities and NWS to activate the EAS for localized events such as severe weather alerts. All other EAS Participants are designated Participating National (PN) stations and must monitor at least two EAS sources, including an LP1 and an LP2 station as specified in the state's EAS plan. *See* 47 C.F.R. §§ 11.18, 11.52(d). Stations that elect not to participate in the national level EAS (*i.e.*, elect not to broadcast the Presidential alert) are designated as Non-participating National (NN) stations and must go off-air while a national EAS alert is in effect. *See* 47 C.F.R. § 11.18(f).

7. At the state level, state governors and state and local emergency operations managers activate the EAS by utilizing state-designated EAS entry points – specifically, State Primary stations and "State Relay" stations.[34] State Relay stations relay both national and state emergency messages to local areas.[35] Local Primary stations are responsible for coordinating the carriage of emergency messages from sources such as the NWS or local emergency management offices as specified in EAS local area plans.[36] State transmission systems vary from state to state but can include "daisy chain" links between broadcast and other terrestrial communications facilities, as well as satellite-based facilities. As depicted in Figure 1, the national EAS is a highly scalable system, with significant overlap in distribution facilities and multiple points of entry for alert messages, depending upon whether they are national, state or local in nature.

B. Commission Actions to Facilitate Next Generation EAS

1. Second Report and Order

8. In 2007, in partial fulfillment of its obligations under *Executive Order 13407*,[37] the Commission adopted the *Second Report and Order*, which revised the Commission's Part 11 EAS rules to lay the foundation for a state-of-the-art, next-generation national EAS (Next Generation EAS).[38] First, to ensure the efficient, rapid, and secure transmission of EAS alerts in a variety of formats (including text, audio, and video) and via different means (broadcast, cable, satellite, and other networks), the Commission required that EAS Participants be capable of receiving CAP-formatted alert messages no later than 180 days after FEMA publicly publishes its adoption of the CAP standard.[39] Second, the

[34] The State Relay Network is composed of State Relay sources, leased common carrier communications facilities, or any other available communications facilities. In addition to EAS monitoring, state emergency messages may be distributed by satellites, microwave, FM subcarrier, or any other communications technology. *See* 47 C.F.R. § 11.20.

[35] *See* 47 C.F.R. § 11.18(d).

[36] *See id*. § 11.18(b).

[37] Exec. Order No. 13,407, 71 Fed. Reg. 36975 (June 26, 2006) (*Executive Order 13407*). *Executive Order 13407* provides that "[i]t is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people in situations of war, terrorist attack, natural disaster, or other hazards to public safety and well-being (public alert and warning system)." *Id*. § 1. *Executive Order 13407* directs the Secretary of Homeland Security to "administer the Emergency Alert System (EAS) as a critical component of the [national] public alert and warning system," including a requirement to "establish, or adopt, as appropriate, common alerting and warning protocols, standards, terminology, and operating procedures for the public alert and warning system." *Id.* § 2(a)(ii). *Executive Order 13407* also directs the Commission to "adopt rules to ensure that communications systems have the capacity to transmit alerts and warnings to the public as part of the [national] public alert and warning system." *Id.* § 3(b)(iii). The Commission has been committed to working with the Secretary, FEMA, and other governmental entities to ensure the effective implementation of *Executive Order 13407*. For example, we have worked with FEMA to implement EAN testing in the State of Alaska and adopted the *National Test Order* to facilitate nationwide testing of the EAS. *See supra* note 22. We also intend to adopt a Notice of Inquiry in 2011 to examine the extent to which emergency alerting could be more effectively deployed using broadband technologies.

[38] *See supra* note 2.

[39] *See Second Report and Order*, 22 FCC Rcd 13275, 13288, para. 26. As explained below, we extended the deadline for compliance with the obligation to receive CAP-formatted messages adopted in the *Second Report and Order* until September 30, 2011. *See infra* para. 22. FEMA announced its adoption of technical standards and requirements for CAP-formatted EAS alerts intended to interface with the IPAWS system on September 30, 2010. *See infra* para. 21.

Commission required EAS Participants to adopt Next Generation EAS delivery systems no later than 180 days after FEMA publicly releases standards for those systems.[40] Third, the Commission required EAS Participants to transmit state and local EAS alerts that are originated by governors or their designees no later than 180 days after FEMA publishes its adoption of the CAP standard,[41] provided that the state has a Commission-approved State Area EAS Plan that provides for delivery of such alerts.[42] The Commission also concurrently adopted the *Next Generation EAS FNPRM* to explore further certain EAS-related issues.[43]

9. *Structuring Next Generation EAS*. In the *Second Report and Order*, the Commission established the framework for the nation's Next Generation EAS. As the Commission explained, the Next Generation EAS will include new and innovative technologies and distribution systems that will provide increased redundancy and resiliency for the delivery of emergency alerts.[44] The Commission identified four cornerstones of the Next Generation EAS: (1) maintaining the existing EAS network; (2) utilizing CAP, which all EAS Participants will implement following its adoption by FEMA; (3) incorporating new authentication and security requirements; and (4) fostering the deployment of new, redundant EAS delivery systems, including satellite, Internet, and wireline networks.[45]

10. *Maintaining the EAS*. In recognition of the long-standing and important use of the EAS for state, local, and weather–related emergencies; broadcast and cable personnel's familiarity with current EAS equipment; the fact that alternative delivery mechanisms, although potentially more robust, have yet to be deployed; and other factors, the Commission concluded that EAS Participants should maintain the existing EAS.[46] Because the station-relay message dissemination process employed by the EAS lacks the flexibility and redundancy of many evolving digital communications systems, however, the Commission also required that EAS Participants upgrade their networks to the Next Generation EAS while maintaining the existing EAS.[47]

11. *Using Common Alerting Protocol with the EAS*. As explained in the *Second Report and Order*, CAP is an open, interoperable standard, developed within the OASIS standards process,[48] that

[40] *See id*. at 22 FCC Rcd 13291, para. 32.

[41] The Mayor of the District of Columbia, as well as the Governors of the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, the U.S. Virgin Islands, American Samoa, and Guam, are also required to have this capability. *See* 47 U.S.C. § 153(40) ("[T]he term 'state includes the District of Columbia and the Territories and possessions.").

[42] *See Second Report and Order*, 22 FCC Rcd 13275, 13300, para. 55. The Commission also included wireline common carriers providing video programming (Wireline Video Providers) in the EAS. *See id*. at 13296-97, para. 46.

[43] Specifically, the Commission sought comment on how the EAS could best serve non-English speakers and persons with disabilities; the extent to which we should require EAS Participants to receive and transmit alerts initiated by local, county, tribal, or other state governmental entities; and requirements for assessing EAS performance. *See Next Generation EAS FNPRM*, 22 FCC Rcd 13275, 13306-08, paras. 72-75.

[44] *See Second Report and Order*, 22 FCC Rcd 13275, 13283, para. 15.

[45] *See id*. at 13283, para. 16.

[46] *See id*. at 13283-84, paras. 17-18.

[47] *See id*. at 13284, para. 18.

[48] OASIS is a not-for-profit, international consortium that drives the development, convergence, and adoption of e-business standards. OASIS – Who We Are, http://www.oasis-open.org/who/. OASIS Common Alerting Protocol (continued….)

incorporates a language developed and widely used for web documents, which permits links to voice; audio, or data files; images; multilingual translations of alerts; and links providing further information.[49]

12. The CAP standard specifies what fields an alert message can contain and what information can be included in the particular fields.[50] A CAP alert provides fields such as message type, scope, incident, event information, event certainty, sender, geographic scope, and the time when an alert becomes effective and expires.[51] CAP also uniquely identifies each specific alert. CAP's standardized fields provide flexibility that facilitates interoperability between and among devices. As the Commission acknowledged in the *Second Report and Order*, "any EAS initiator can take information from a CAP-based message and translate it into any other standard for distribution over a particular channel, network, or technology," which is particularly relevant to translating a CAP-formatted message into a SAME-formatted message.[52] CAP is also backwards-compatible with SAME to the extent that it can be used to relay SAME data.

13. As indicated above, the EAS and the NWS currently utilize the SAME protocol, which introduces special digital codes at the beginning and the end of messages.[53] SAME provides information concerning the originator of the alert, the type of alert (or "event"), the areas affected, the duration of the alert, the time the alert was issued, and the call sign of the EAS Participant that is transmitting or retransmitting the alert.[54] As explained in the *Second Report and Order*, SAME was originally developed to be transmitted via broadcast radio for receipt by relatively simple devices.[55] While SAME has performed well for the existing EAS and NWR, it does not fully utilize the expansive capabilities inherent in more modern digital transmission systems.[56]

14. Although CAP and SAME both convey data, the two protocols function in entirely different ways. CAP essentially represents an envelope in which data is packaged according to predetermined fields and packetized for transmission over various IP-based mediums, such as the Internet. The SAME protocol is designed to take specific data and an audio message and modulate those onto an RF signal. Thus, for example, CAP can convey an audio message either as an audio file (*e.g.*, .WAV) or a link to a URL (for streaming audio), while for SAME-formatted messages, the audio portion

(Continued from previous page)
Version 1.2 (1 July 2010) (OASIS CAP Standard v1.2) was approved by OASIS on August 12, 2010. *See* Common Alerting Protocol (CAP) 1.2 Receives Approval as OASIS Standard, http://www.oasis-open.org/news/oasis-news-2010-08-12.php. A copy of OASIS CAP Standard v1.2 is available at http://www.oasis-open.org/specs/#capv1.2.

[49] *See Second Report and Order*, 22 FCC Rcd 13275, 13285-88, paras. 22-25. *See also* OASIS Common CAP Standard v1.2, § 3.2.

[50] *See* OASIS Common CAP Standard v1.2, § 3.2.

[51] *See id*. *See also* "Filtering and Routing of Alert Messages using Common Alerting Protocol (CAP)," Eliot Christian, USGS Slide 14 (Feb. 2005) http://www.search.gov/cap/routing.ppt.

[52] *Second Report and Order*, 22 FCC Rcd 13275, 13286-87, para. 24.

[53] *See supra* para. 5.

[54] *See* 47 C.F.R. § 11.31. Under the SAME/EAS Protocol, an EAS alert uses a four-part message: (1) preamble and EAS header codes (these codes contain information regarding the identity of the sender, the type of emergency, its location, and valid time period of the alert); (2) audio attention signal; (3) message; and (4) preamble and EAS end of message codes. *See id*. § 11.31(a).

[55] *See Second Report and Order*, 22 FCC Rcd 13275, 13284-85, para. 20 (*citations omitted*).

[56] *See id*.

of the message is already modulated onto the RF signal along with the EAS codes.[57] Accordingly, when the EAS decoder receives a SAME-formatted message, it also receives whatever audio may be associated with that message, whereas when an EAS decoder receives a CAP-formatted message, it must play back the audio file or retrieve streaming audio from another source.

15. *Next Generation Distribution System*. While the Commission elected to maintain the existing EAS, it also concluded that it should enhance the distribution architecture of the EAS.[58] Based on the record before it, the Commission acknowledged that it could improve the EAS by authorizing the delivery of alerts through the existing EAS coupled with new redundant distribution systems for EAS, such as satellite.[59] The Commission also concluded, however, that FEMA is best positioned to determine the types of additional EAS systems that EAS Participants should accommodate.[60] Accordingly, the Commission indicated that "should FEMA announce technical standards for any Next Generation EAS alert delivery system, EAS Participants must configure their networks to receive CAP-formatted alerts delivered pursuant to such delivery system, whether wireline, Internet, satellite or other, within 180 days after the date that FEMA announces the technical standards for such Next Generation EAS alert delivery."[61]

2. CSRIC Recommendations for Part 11

16. On March 19, 2009, the Commission, pursuant to the Federal Advisory Committee Act,[62] renewed the charter for the Communications Security, Reliability, and Interoperability Council (CSRIC) for a period of two years, through March 18, 2011,[63] subsequently renewed until March 18, 2013.[64] The purpose of the CSRIC is to provide recommendations to the Commission to ensure optimal security, reliability, operability, and interoperability of communications systems, including public safety, telecommunications, and media communications systems.[65] The CSRIC's duties include recommending ways to improve EAS operations and testing, including best practices, and to ensure that all Americans, including those living in rural areas, the elderly, people with disabilities, and non-English speakers, have

[57] Encoding a SAME-formatted message involves modulating the various codes associated with the SAME protocol and an audio message onto an RF signal using the audio frequency-shift keying (AFSK) modulation scheme to open an audio channel in the EAS decoder. Specifically, the EAS decoder is activated by receiving the SAME protocol preamble codes plus header codes, which are repeated three times consecutively at the start of an EAS message transmission. The EAS decoder uses bit-by-bit comparison for error detection to ensure that at least two of the three match. Depending upon the nature of the alert message, this three-time transmission (or "burst") is followed by a two-tone Attention Signal (8-25 seconds in duration), which functions as an audio alert to listeners and viewers that an emergency message follows. The Attention Signal may be followed by an audio message. At the end of this message, the preamble plus end of message code is transmitted three consecutive times to signal to the EAS decoder that the alert message is terminated and to return to regular programming. *See* 47 C.F.R. § 11.31.

[58] *See Second Report and Order*, 22 FCC Rcd 13275, 13291, para. 32.

[59] *See id*.

[60] *See id.* (*citing Executive Order 13407*, §§ 2(a)(ii), 3(b)(iii)).

[61] *See id*.

[62] 5 U.S.C. Appendix 2.

[63] *See* 74 Fed. Reg. 11721-11722 (March 19, 2009).

[64] *See* 76 Fed. Reg. 17650-17652 (March 30, 2011).

[65] *See* Charter of the FCC's Communications, Security, Reliability, and Interoperability Council (*CSRIC Charter*) at 1, *available at* http://www.fcc.gov/pshs/docs/advisory/csric/CSRC_charter_03-19-2009.pdf.

access to EAS alerts and other emergency information.[66]

17. The Commission tasked this advisory committee, a cross-section of government, industry, and public interest experts, to recommend revisions to the Commission's Part 11 rules in light of FEMA's then-pending adoption of CAP.[67] On October 7, 2010, CSRIC adopted a final report from its Working Group 5A, which included a number of recommendations for revisions to the Part 11 rules related to the obligation of EAS Participants to accept CAP-formatted messages (the "*CSRIC Final Report*").[68] We address these recommendations below in our discussion of specific proposals to revise our Part 11 rules.

3. Part 11 Public Notice

18. On March 25, 2010, in anticipation of FEMA's adoption of CAP, the Public Safety and Homeland Security Bureau (Bureau) released the *Part 11 Public Notice*, which sought informal comment regarding what, if any, Part 11 changes the introduction of CAP might necessitate.[69] The *Part 11 Public Notice* asked commenters to identify with specificity those rules the Commission should modify or delete and to suggest new rules for Part 11 – or a new framework of rules – to replace the existing Part 11 rules.[70] The *Part 11 Public Notice* also asked commenters to consider the degree to which the Commission can incorporate flexibility into any new rules it adopts for Part 11, so that the rules can accommodate future versions of CAP without further rule changes.[71]

19. The Bureau observed that the *Second Report and Order* requires EAS Participants to configure their networks to receive CAP-formatted alerts delivered via any new delivery systems, whether wireline, Internet, satellite, or other, within 180 days after the date that FEMA announces the technical standards for the Next Generation EAS but that the Commission's rules presently do not address such alert distribution methods.[72] Accordingly, the *Part 11 Public Notice* also asked commenters to identify specific rule changes or additions that they foresee could advance or facilitate introduction of a CAP-based Next Generation EAS architecture.[73] The *Part 11 Public Notice* also sought comment on what Part 11 rule changes, if any, are necessary to ensure access to a CAP-based EAS by people with disabilities and those who do not speak English; how states that have adopted CAP currently address this issue; and the status of any initiatives or programs developed by, as well as any ongoing discussions among, interested stakeholders to address these issues.[74]

20. We received 14 comments and 10 reply comments in response to the Bureau's *Part 11*

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[66] *See CSRIC Charter* at 2.

[67] *See* Working Group 5A Description, *available at* http://www.fcc.gov/pshs/advisory/csric/wg-5a.pdf.

[68] *See* CSRIC, Working Group 5A, CAP Introduction, Final Report, *available at* http://www.fcc.gov/pshs/docs/csric/CSRIC%205A%20Working%20Group.pdf.

[69] *See* Public Safety and Homeland Security Bureau Seeks Informal Comment Regarding Revisions to the FCC's Part 11 Rules Governing the Emergency Alert System Pending Adoption of the Common Alerting Protocol by the Federal Emergency Management Agency, *Public Notice*, 25 FCC Rcd 2845 (2010) (*Part 11 Public Notice*).

[70] *See id.* at 2.

[71] *See id*.

[72] *See id*.

[73] *See id*.

[74] *See id*. at 3.

Public Notice, which we address below in our discussion of the Part 11 rule revisions.

4. FEMA Adoption of CAP

21. On September 30, 2010, FEMA announced its adoption of technical standards and requirements for CAP-formatted EAS alerts.[75] Specifically, FEMA identified three documents as defining the FEMA Integrated Public Alert and Warning System (IPAWS) "technical standards and requirements for CAP and its implementation": (1) the OASIS CAP Standard v1.2; (2) an IPAWS Specification to the CAP Standard (CAP v1.2 IPAWS USA Profile v1.0); and (3) the EAS-CAP Industry Group's Recommendations for a CAP-EAS Implementation Guide, Version 1.0 (May 17, 2010).[76] Taken together, these documents set forth the requirements that an alert originator must meet to initiate an alert message in the CAP format to distribute through IPAWS to EAS Participants. Specifically, CAP Standard v1.2 is the baseline message format; CAP v1.2 IPAWS USA Profile v1.0 establishes the additional formatting requirements for processing of a CAP Standard v1.2 message by IPAWS (*i.e.*, it restricts and specifies the fields in CAP that can be used with the IPAWS system); and the EAS-CAP Industry Group's Recommendations for a CAP-EAS Implementation Guide establishes requirements for translating a message formatted pursuant to the foregoing standards into a message that is compliant with the EAS Protocol (*i.e.*, it further restricts and specifies the fields available in a message formatted pursuant to CAP Standard v1.2 and CAP v1.2 IPAWS USA Profile v1.0 that can be used with the EAS).

5. Waiver Order

22. On November 18, 2010, we adopted the *Waiver Order*, which extended the 180-day deadline for EAS Participants to meet the CAP-related obligations we adopted in the *Second Report and Order* until September 30, 2011.[77] We explained that our decision was based on the concern that licensees would face difficulties obtaining the appropriate equipment within 180 days of FEMA's adopting CAP due to various factors raised by parties responding to the *Part 11 Public Notice*.[78] We observed that recent changes to the EAS CAP landscape, such as the novel issue of the relationship between FEMA CAP conformance testing and the Commission's Part 11 certification requirements and FEMA's adoption of the EAS-CAP Industry Group's CAP-to-EAS Implementation Guide as the standard for translating CAP-formatted messages into SAME-compliant messages, presented changed circumstances that would make it difficult for licensees to obtain CAP-compliant EAS equipment by the original 180-day deadline.[79] We also explained in the *Waiver Order* that we would seek comment on whether the extension for CAP acceptance by EAS Participants granted therein is sufficient and reserved the right to further extend the deadline for CAP reception in whatever rule revisions may result from this item.[80]

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[75] *See* FEMA, "FEMA Announces Adoption of New Standard for Emergency Alerts," Release Number: HQ-10-192 (rel. Sept. 30, 2010), *available at* http://www.fema.gov/news/newsrelease.fema?id=52880.

[76] *See id*.

[77] *See* Review of the Emergency Alert System, Order, EB Docket No. 04-296, FCC 10-191 (rel. Nov. 23, 2010) at para. 1 (*Waiver Order*).

[78] *See id*. para. 9.

[79] *See id*.

[80] *See id*. para. 11.

III. DISCUSSION

23. In this *Third Further Notice of Proposed Rulemaking*, we seek comment on what changes we should make to the Part 11 rules to fully effectuate the CAP-related obligations adopted in the *Second Report and Order*, as well as other rule changes and clarifications intended to streamline Part 11 and generally enhance the overall effectiveness of the EAS. We also reach tentative conclusions in response to various recommendations made by CSRIC and the parties responding to the *Part 11 Public Notice* and propose specific revisions to some of the Part 11 rules, which are included in Appendix A.

A. A. Scope of CAP-Related Part 11 Revisions

24. In the *Second Report and Order*, the Commission concluded that EAS Participants should maintain the existing legacy EAS, including use of the SAME protocol, because, among other reasons, EAS Participants had yet to deploy alternative and more robust delivery mechanisms.[81] However, because the daisy-chain message dissemination process used by the legacy EAS lacks the flexibility and redundancy of these evolving digital communications systems, the Commission required that EAS Participants deploy equipment capable of receiving CAP messages[82] and upgrade their networks to the Next Generation EAS as FEMA adopts standards governing Next Generation EAS distribution systems.[83] The implementation of CAP as an EAS alert message formatting option, therefore, was envisioned as a parallel mechanism to initiating SAME-formatted alerts within the existing EAS system. This approach would facilitate a CAP-based Next Generation EAS, which likely will initially be deployed and operate in parallel to the legacy EAS. Because the Next Generation EAS is not yet operational, we focus our efforts here on revising the Part 11 rules to accommodate the processing of CAP-formatted messages within the existing EAS parameters. We seek comment generally on whether this is the correct approach or whether we should consider alternative approaches in light of any developments that may have occurred since adoption of the *Second Report and Order*. What are the potential costs and benefits of this approach? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

25. Most of the parties responding to the *Part 11 Public Notice* who commented on the issue of facilitating CAP within the existing EAS parameters and Part 11 framework supported this approach. Monroe Electronics, Inc. (Monroe) stated, for example, that the legacy EAS "is a valuable redundancy to the proposed next generation system [and in] most natural disasters the broadcast medium is the last system standing and is unparalleled in the "one to many" message distribution."[84] Sage Alerting Systems, Inc. (Sage) similarly noted that while CAP has many advantages, "[i]n those cases where a telecommunications outage … occur[s] concurrently with the emergency being alerted, … a broadcaster to broadcaster link 'daisy chain' may be the only way to relay EAS alerts from the outside of an event to the inside."[85] Sage further observed that "a total rewrite [of the Part 11 rules] is [not] required or desired before the 180 day clock starts," adding that "CAP can begin to be used with the rules as they exist now,

[81] *Second Report and Order* at 13283-84, paras. 17-18.

[82] *See id*. at 13288, para. 26.

[83] *See id*. at 13283-84, paras. 17-18, 13291, para. 32.

[84] Monroe Electronics, Inc. Comments, EB Docket 04-296 (filed May 17, 2010) at 2 (Monroe Comments). *See also* SpectraRep LLC Comments, EB Docket 04-296 (filed May 17, 2010) at 2 (SpectraRep Comments) ("[T]he nature of the legacy EAS system … adds useful redundancy even after CAP EAS has been implemented.").

[85] Sage Alerting Systems, Inc. Comments, EB Docket 04-296 (filed May 17, 2010) (Sage Comments) at 2-3.

with minor tweaks."[86] TFT, Inc. (TFT) asserted that "maintaining the web-structure of EAS monitoring assignments in addition to CAP monitoring is essential," at least until "complete CAP servers and their connections are available to EAS Participants."[87] Commenter Adrienne Abbott-Gutierrez (Abbott-Gutierrez) observed that state and local public safety agencies may not understand the capabilities and nuances of CAP messaging, and therefore we should craft the Part 11 rules to allow EAS Participants the "flexibility they will need to comply with the new rules while dealing with state and local agencies that do not have the ability to initiate CAP messages."[88]

26. Other parties raised concerns about the efficacy of the current EAS. The National Association of Broadcasters (NAB), for example, stated it is "concerned about the potential impact of th[e] technology gap" between the SAME protocol and CAP, and urged the Commission to "ensure that the inadequacies of SAME (*e.g.*, event code overlap, targeting based on political jurisdictions) are not carried over into a new CAP-based next-generation EAS."[89] NAB acknowledged, however, that the existing EAS system "does have certain advantages over the next-generation system" and that "[t]he Commission . . . should [therefore] consider how long broadcasters should maintain SAME-based EAS following the implementation of CAP-formatted EAS."[90] Commenter Art Botterell (Botterell) explained that "the SAME format has several serious deficiencies, especially when compared with the much more complete and flexible CAP format" and stated that the Commission should at least not "allow the familiar status quo of SAME event codes and geographic targeting based on political jurisdiction to slip into new regulations by default."[91] Botterell further suggested: "As a more proactive step[,] the Commission might choose to set a 'sunset' date for the use of the SAME encoding over broadcast signals."[92]

27. Our tentative view is that while the SAME protocol used by the legacy EAS is more limited regarding the information it can convey than CAP,[93] the many benefits of maintaining the legacy EAS previously outlined by the Commission in the *Second Report and Order* continue to apply today.[94] Moreover, FEMA has stated that the legacy EAS will continue to provide a nationwide alerting mechanism to operate as part of FEMA's Integrated Public Alert and Warning System (IPAWS).[95] Further, even after IPAWS is deployed, it is not clear that state alerting authorities and personnel involved with initiating state alerts will be able to initiate anything other than SAME-formatted messages for some time, and we observe that NWS has yet to indicate a date by which it will be switching to a CAP-based alerting format. Thus, switching over to a fully CAP-centric EAS system – where EAS messages are inputted and outputted in CAP format rather than SAME format – at this time could be detrimental to the

[86] *Id*. at 2. *See also* SpecraRep Comments at 2 ("Much of the underlying framework of Part 11 can remain in place.").

[87] TFT, Inc. Reply Comments, EB Docket 04-296 (filed June 11, 2010) at 2-3 (TFT Reply Comments).

[88] Adrienne Abbott-Gutierrez Comments, EB Docket 04-296 (filed May 17, 2010) at 1 (Abbott-Gutierrez Comments).

[89] National Association of Broadcasters Reply Comments, EB Docket 04-296 (filed June 14, 2010) at 10-11 (NAB Reply Comments).

[90] *Id*. at 11.

[91] Art Botterell Comments, EB Docket 04-296 (filed April 19, 2010) at 9 (Botterell Comments).

[92] *Id*.

[93] *See*, *e.g*, *Second Report and Order* at 13284-85, para. 20.

[94] *See id*. at 13283-84, paras. 17-18.

[95] *See* http://www.fema.gov/emergency/ipaws

entities that utilize the EAS the most: states and NWS. Finally, we again observe that FEMA has adopted the standards necessary for formatting alert messages into CAP and translating such CAP-formatted messages into SAME-compliant messages; thus, the groundwork for implementing CAP-formatted alert initiation within the existing EAS system is already in place.[96]

28. Accordingly, we tentatively conclude that, for the time being, we will continue the approach adopted by the Commission in the *Second Report and Order* and maintain the existing legacy EAS, including utilization of the SAME protocol. To be clear, under this transitional approach, the CAP-related changes to Part 11 on which we seek comment or that we tentatively propose in this item are designed to permit EAS Participants to process and transmit CAP-formatted messages over the existing EAS, but subject to the technical requirements and limitations of the existing EAS (*i.e.*, the CAP-formatted message will be converted into and broadcast – and to the extent feasible, encoded for rebroadcast[97] – in the SAME format) until the Next Generation EAS has been fully deployed and is ready to replace (or operate in parallel with) the existing EAS. We also tentatively conclude that we will defer to our Notice of Inquiry on Broadband Alerting consideration of what changes, if any, to our Part 11 rules may be necessitated by the adoption of a CAP-based Next Generation EAS alerting system that might replace or operate in parallel with the current EAS.

29. We seek comment on our tentative conclusions. Should we amend the existing Part 11 rules to more fully codify the basic obligations to receive CAP-formatted messages? Alternatively, are the deficiencies of SAME relative to CAP identified by NAB and Botterell sufficiently significant as to outweigh the benefits of retaining the legacy EAS system until such time as it can be replaced by the Next Generation EAS system? How long will it take to switch to a CAP-centric EAS system? Would switching to a CAP-centric EAS system better accommodate FEMA's plans for IPAWS? What would such a CAP-centric approach entail, and how would it affect EAS Participants? Have there been any developments since the *Second Report and Order* that would suggest that an alternative approach is warranted? What are the cost and benefits associated with a CAP-centric EAS system? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

B. B. Obligation to Accept CAP Messages

30. The Commission also stated in the *Second Report and Order* that it would maintain the existing EAS system, including the EAS Protocol.[98] The general obligation to receive CAP-formatted messages is codified in section 11.56 of the rules.[99] As detailed below, CSRIC and the parties responding to the *Part 11 Public Notice* proposed several additional Part 11 rule revisions to fully codify the obligation to receive CAP messages. These proposals covered CAP-to-SAME protocol translation, CAP monitoring, Next Generation EAS, equipment requirements, and miscellaneous related issues.

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[96] *See* FEMA, "FEMA Announces Adoption Of New Standard For Emergency Alerts," *available at* http://www.fema.gov/news/newsrelease.fema?id=52880.

[97] Although it appears that a CAP-formatted message can be converted into a SAME-compliant message for broadcast to the public, including any audio portion contained or referenced within the CAP message, it is not clear whether the audio portion of a CAP-formatted message (which generally can be contained as an audio file or a URL link to streaming audio) that has been converted into a SAME-compliant message can be encoded for rebroadcast to monitoring stations.

[98] *Second Report and Order*, 22 FCC Rcd 13275, 13283-84, paras. 17-18.

[99] 47 C.F.R. § 11.56.

1. CAP-Formatted Message Translation to SAME

31. As indicated above, the *Second Report and Order* required that EAS Participants be capable of receiving CAP-formatted EAS messages but did not specify what EAS Participants are required to do with such messages upon receipt. The *Second Report and Order* also required that EAS Participants maintain the existing SAME-based EAS.[100] However, the *Second Report and Order* did not specify whether or how EAS Participants must convert the CAP-formatted messages they receive into SAME-compliant messages for broadcast to the public (and rebroadcast to other stations).

32. With respect to translating CAP-formatted message into SAME, CSRIC and parties responding to the *Part 11 Public Notice* indicated that we need a separate standard to ensure that EAS Participants uniformly present messages and alert data to the public. CSRIC, for example, observed that because "both CAP v1.2 and the CAPv1.2 IPAWS Profile v1.0 make use of several free form text elements and several optional elements, there is ample opportunity for a CAP message rendered by one CAP-to-EAS device to differ when rendered by another vendor's device."[101] Sage stated, "The CAP protocol is significantly more complex than EAS, with even greater opportunity for slight differences in implementations and procedures to cause a failure to deliver consistent results to EAS participants."[102]

33. To ensure uniform consistency across all devices and delivery platforms in how EAS Participants decode messages formatted pursuant to OASIS CAP Standard v1.2 and CAP v1.2 IPAWS USA Profile v1.0 and present them to the public, the EAS-CAP Industry Group (ECIG)[103] developed the ECIG Implementation Guide, which outlines how to translate CAP-formatted messages into SAME-compliant messages (*i.e.*, it specifies the EAS Participant's CAP-to-SAME translation requirements).[104] FEMA announced its adoption of the ECIG Implementation Guide along with its adoption of CAP v1.2 IPAWS Profile v1.0 and OASIS CAP Standard v1.2 on September 30, 2010.[105] CSRIC and other parties recommended that the Commission amend Part 11 to require compliance with the ECIG Implementation

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[100] *See Second Report and Order* at 13283-84, paras. 17-18.

[101] *CSRIC Final Report*, § 5.4.2.

[102] Sage Comments at 4. *See also* Gary E. Timm Comments, EB Docket 04-296 (filed May 17, 2010) at 8 (Timm Comments).

[103] The EAS-CAP Industry Group "is a coalition of Emergency Alert System equipment, software and service providers, with current voting members including: Alerting Solutions, Inc.; Communications Laboratories, Inc.; iBiquity Digital Corporation; Monroe Electronics, Inc.; MyStateUSA; Sage Alerting Systems, Inc.; SpectraRep, LLC; TFT, Inc.; Trilithic, Inc. and Warning Systems, Inc." EAS-CAP Industry Group, Board of Directors, Comments, EB Docket 04-296 (filed May 17, 2010) at 1-2. *See also* ECIG's web site at http://eas-cap.org/members.htm.

[104] *See* ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0 (May 17, 2010), EB Docket 04-296 (filed May 17, 2010) (the "ECIG Implementation Guide") (this document is also available on ECIG's web site at: http://eas-cap.org/documents.htm). Although the CAP v1.2 IPAWS Profile v1.0 broadly outlines how to incorporate the EAS elements of an alert message into a CAP-formatted message, it does so in the context of sending a message via the IPAWS system (*i.e.*, it specifies the alert message originator's CAP translation requirements). *See* CAP v1.2 IPAWS Profile v1.0, § 1.1 ("In order to meet the needs of the devices intended to receive alerts from the [IPAWS] System of Systems (SoS), this CAP v1.2 IPAWS Profile constrains the CAP v1.2 standard for receipt and translation with and among IPAWS exchange partners."). *See, e.g.*, *CSRIC Final Report*, § 5.4. By contrast, the ECIG Implementation Guide also addresses CAP-to-EAS translation but is more narrowly focused on ensuring that the CAP-formatted message data fields are populated and uniformly decoded in a manner that complies with the SAME protocol requirements.

[105] *See supra* para. 21.

Guide.[106]

34. We seek comment on whether our revision of the Part 11 rules should include a standardized method of decoding and translating CAP-formatted messages into SAME-compliant messages to ensure uniform consistency across devices and delivery platforms in how EAS Participants present these messages to the public. Are CSRIC and the various parties responding to the *Part 11 Public Notice* correct that a specific CAP-to-SAME translation standard is necessary to ensure that EAS Participants uniformly decode and broadcast CAP-formatted alert messages (and encode them for rebroadcast) as SAME-compliant messages? What are the costs and benefits of striving for uniformity in how EAS Participants decode CAP-formatted messages and present them to the public? Given that CAP-formatted messages can only convey audio messages as audio files or links to alternate sources (such as URLs) for streaming audio, is it technically feasible to encode that portion of a CAP-formatted message in a SAME-compliant message for rebroadcast to monitoring stations? If an EAS Participant cannot encode the audio portion of a CAP-formatted message in a SAME-compliant manner, would the audio portion of CAP messages be limited to EAS Participants that initially receive such messages via IP-based connections? Does this approach represent a cost-effective means for achieving uniform consistency across devices and delivery platforms in how CAP alert messages are presented to the public, or are there alternative approaches that could be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

35. To ensure greater uniformity in the output of devices subject to Part 11, we tentatively conclude that we should amend section 11.56 to require EAS Participants to convert CAP-formatted EAS messages into SAME-compliant EAS messages in accordance with the ECIG Implementation Guide.[107] As indicated above, adopting the ECIG Implementation Guide as the standard for translating CAP-formatted messages into SAME-compliant messages should harmonize CAP elements with the Part 11 rules, thus ensuring that CAP-formatted EAS messages are converted into SAME-compliant messages in a consistent manner across devices and delivery platforms. Should the Commission directly regulate CAP-to-SAME conversion, or is it enough to specify in section 11.56 that EAS equipment must be capable of outputting CAP-formatted messages in EAS protocol-compliant form? What are the cost and benefits associated with ensuring that CAP-formatted EAS messages are converted into SAME-compliant messages? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

2. CAP-Related Monitoring Requirements

36. Section 11.52 sets forth the basic monitoring requirements that EAS Participants must follow to facilitate receipt of EAS alert messages.[108] This section requires EAS Participants to monitor two EAS sources, which are assigned in the State Area EAS Plan.[109] While the *Second Report and Order* codified in section 11.56 the general obligation of EAS Participants to receive CAP-formatted EAS alerts,

[106] *See CSRIC Final Report*, § 5.1; Monroe Comments at 2; Timm Comments at 8; Sage Comments at 4; TFT Reply Comments at 5.

[107] As indicated, FEMA has adopted the ECIG Implementation Guide to serve this purpose. *See supra* para. 21.

[108] *See* 47 C.F.R. § 11.52.

[109] *See id*. § 11.52(d).

it did not specify any associated monitoring requirements.[110]

37. Commenters made several recommendations with respect to clarifying federal and state CAP-related monitoring requirements. CSRIC stated, "A new subparagraph is needed [in section 11.52] to require EAS participants to monitor multiple IP-based CAP alert sources (*i.e.*, CAP servers); in addition to legacy (audio) EAS alert sources."[111] According to CSRIC, "EAS participants should monitor at least one state and/or local CAP EAS source (*i.e.*, CAP server) in addition to a Federal CAP source."[112] SpectraRep suggested, "Multiple CAP sources should be monitored to ensure redundancy, to provide direct delivery of State and Local CAP messages, and to permit monitoring of national CAP messages from future proposed sources such as IPAWS."[113] SpectraRep recommended that we add a subparagraph to section 11.52 requiring EAS Participants "to monitor at least two CAP sources [one state and one federal] in addition to the requirements of existing subparagraph §11.52 (d)."[114]

38. As a preliminary matter, we observe that the technical construction and distribution methodologies of CAP messages are different from SAME messages. For example, under the current EAS system, SAME-formatted messages are AFSK-modulated data messages that are received by monitoring the over-the-air broadcasts of designated broadcast stations.[115] CAP messages are IP-based data packets that can be distributed using various distribution models. FEMA has indicated that the IPAWS system will employ Really Simple Syndication, version 2.0 (RSS), to distribute CAP-formatted alerts to EAS Participants.[116] RSS is an XML-based format for sharing and distributing Web content, such as news headlines, from various sources.[117] RSS feeds will automatically update content displayed in RSS-enabled browsers, readers, and other programs that use common feed lists. The RSS specification and RSS reader/browser software is freely available online. Under this alert distribution model, RSS-configured EAS equipment will poll FEMA's RSS source at periodic intervals (programmed into the EAS equipment by the EAS Participant), and any pending CAP messages will be sent via the RSS feed to the EAS equipment. The CAP message will be wholly contained within the RSS file's "description" field,[118] and EAS equipment will extract the CAP data in accordance with the ECIG Implementation Guide to

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[110] *See Second Report and Order*, 22 FCC Rcd 13275, 13288, para. 26.

[111] *CSRIC Final Report*, § 5.1.

[112] *Id*. CSRIC points out, "Monitoring multiple CAP sources is necessary to ensure redundance and support the mandatory Gubernatorial Must-Carry message in §11.55(a)." *Id*. *See also* TFT, Inc., Comments, EB Docket 04-296 (filed May 14, 2010) at 7 (TFT Comments); Gary E. Timm Reply Comments, EB Docket 04-296 (filed June 7, 2010) at 2 (Timm Reply Comments). CSRIC also recommends updating section 11.54(b)(1) to reflect IPAWS monitoring. *See CSRIC Final Report*, § 5.1.

[113] SpectraRep Comments at 3. *See also* Monroe Reply Comments, EB Docket 04-296 (filed June 14, 2010) at 1 ("§11.20 must make reference to state and local CAP sources and networks, and further that §11.11 and §11.52 must require the monitoring of CAP sources.") (Monroe Reply Comments).

[114] SpectraRep Comments at 2. *See also* TFT Reply Comments at 3.

[115] *See* 47 C.F.R. § 11.31(a). *See also supra* note 57.

[116] *See* http://www.fema.gov/emergency/ipaws/CAP_Feed.shtm

[117] *See*, *e.g.*, the RSS Advisory Board's description of the RSS specification at http://www.rssboard.org/rss-specification.

[118] RSS files – or "documents" – contain three mandatory elements, or data fields (although additional elements may be included): title, link (the URL link associated with the RSS channel, or "feed"), and description (*e.g.*, a typical news-oriented RSS document will provide the title of an article, a brief summary (in the description field) and a link to the article on the news organization's web site). *See id*.

ensure an EAS Protocol-compliant output. Accordingly, we tentatively conclude that we should amend section 11.52 to include a requirement that EAS Participants monitor FEMA's IPAWS RSS feed(s) for federal CAP-formatted messages.[119]

39. We seek comment on this tentative conclusion. For example, would our proposed approach be sufficient to ensure that EAS Participants receive federal CAP-formatted messages? Would such an approach to federal CAP monitoring be sufficient to capture the technical elements of monitoring, including any specific machine-to-machine interface requirements that may govern communications between the EAS equipment and the source of the RSS feed? Is or should there be any limit as to how many federal RSS feeds EAS equipment can technically and/or practically monitor? Would use of RSS as the CAP message transport medium limit the utility of CAP, such as its ability to include audio messages as audio files or links to URLs for streaming audio?[120] Should we specify authentication and/or digital verification standards or requirements governing any aspect of this approach? Should we specify the timing intervals governing when the EAS equipment will poll the RSS feed in the Part 11 rules or leave timing intervals to EAS Participants, and if the former, what interval would be appropriate? Would an RSS-based monitoring requirement present any unique equipment certification concerns? Would the ability to distribute alert messages in either the SAME-format via station-to-station broadcasts or CAP format via IP-based RSS connections enhance redundancy? What are the costs and benefits of using the RSS approach to monitor federal CAP sources? Are there alternative approaches that would be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action? Is direct regulation of federal CAP monitoring necessary or is it enough to specify in section 11.56 that EAS equipment must be capable of converting CAP-formatted messages into EAS protocol-compliant messages?

40. The Commission did not specify monitoring requirements for CAP-formatted messages initiated by state governors (or their designees), although it did require that the State Area EAS Plan submitted for FCC approval specify the methodology for aggregating and delivering such messages.[121] As discussed in section III.E of this item, while it is conceivable that states could deploy different CAP-based systems[122] – and, presumably, different monitoring specifications – it has never been the

[119] *See Second Report and Order*, 22 FCC Rcd 13275, 13291, para. 32 ("[S]hould FEMA announce technical standards for any Next Generation EAS alert delivery system, EAS Participants must configure their networks to receive CAP-formatted alerts delivered pursuant to such delivery system, whether wireline, Internet, satellite or other, within 180 days after the date that FEMA announces the technical standards for such Next Generation EAS alert delivery.").

[120] Although a CAP-formatted message generally can provide an audio message in the form of an audio file or a URL link to streaming audio, because the RSS file is essentially a text file (that typically includes a URL link to web-based content associated with such file), such as a news article summarized in the RSS text, it would appear that any audio message associated with a CAP-formatted message conveyed within an RSS document would have to be specified in the RSS text as a URL link to streaming audio.

[121] *See* 47 C.F.R. § 11.21(a) ("The State plan must specify how state-level and geographically targeted EAS messages initiated by a state governor or his/her designee will be transmitted to all EAS Participants who provide services in the state, and must include specific and detailed information describing how such messages will be aggregated, designated as mandatory, and delivered to EAS Participants."). *See also* 47 C.F.R. § 11.55.

[122] CSRIC, for example, observed that "IP based systems are . . . in . . . 18 states (plus the District of Columbia), of which at least 10 are already originating and disseminating CAP messages for EAS, and the remainder appear to have near-term plans to begin introducing CAP message origination and dissemination within their state systems." *CSRIC Final Report*, § 4.1.2. CSRIC further observed that "[w]here advanced EAS capabilities have not yet been deployed, emergency managers continue to utilize EAS in traditional manners." *Id*.

Commission's intent that EAS Participants be required to deploy multiple variations of EAS equipment to meet their basic CAP-related obligations.[123] Further, because the Commission's focus in this proceeding has been on implementing Federal CAP message processing over the existing EAS, we have proposed that the basic obligation to process gubernatorial CAP messages should only apply if the message has been formatted consistent with the CAP standards (*i.e.*, pursuant to OASIS CAP Standard v1.2 and CAP v1.2 IPAWS USA Profile v1.0) adopted by FEMA.[124] The same logic should apply to the monitoring aspect of gubernatorial CAP messages. Specifically, we propose that EAS equipment should only be required to employ the same monitoring functionality for state CAP messages that are used for federal CAP messages (*i.e.*, RSS). Accordingly, we tentatively conclude that we should amend section 11.52 to include a requirement that EAS Participants monitor the RSS feed(s) designated by a state as the source of governor-originated CAP messages (and identified in the state's EAS Plan submitted to and approved by the Commission).

41. We seek comment on this proposal. Would such an approach to state CAP monitoring be sufficient to capture the technical elements of monitoring, including any machine-to-machine interface requirements that may govern communications between the EAS equipment and the source of the RSS feed? Is or should there be any limit as to how many state RSS feeds EAS equipment can technically and/or practically monitor? Is there a potential for variation among state CAP systems that might create additional considerations for monitoring that should be taken into account? Should we specify authentication and/or digital verification standards or requirements governing any aspect of this approach? Should we specify the timing intervals governing when the EAS equipment will poll the state RSS feed in the Part 11 rules, leave it to the States to develop in their State EAS Plans or leave the timing intervals to EAS Participants? If we set the timing intervals in the Part 11 rules, what interval would be appropriate? Would the ability to distribute alert messages in either the SAME-format via station-to-station broadcasts or CAP format via IP-based RSS connections enhance redundancy? What are the costs and benefits of using the RSS approach to monitor state CAP sources? Are there alternative approaches that would be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action? Is direct regulation of state CAP monitoring necessary, or is it enough to specify in section 11.55 that EAS equipment must be capable of converting gubernatorial CAP-formatted messages into EAS protocol-compliant messages (where the methodology for such CAP system has been detailed in a State Area EAS Plan approved by the Commission)?

3. Next Generation Distribution Systems

42. In the *Second Report and Order*, the Commission concluded that it should enhance the distribution architecture of the existing EAS.[125] The Commission indicated that, based on the record before it, we could improve the EAS by authorizing the delivery of alerts through the existing EAS coupled with new redundant distribution systems for EAS.[126] The Commission further concluded, however, that FEMA is best positioned to determine the types of additional EAS systems that EAS Participants should accommodate.[127] Accordingly, the Commission stated that "should FEMA announce

[123] *See infra* para. 115.

[124] *See infra* para. 116.

[125] *See Second Report and Order*, 22 FCC Rcd 13275, 13291, para. 32.

[126] *See id*.

[127] *See id*.

technical standards for any Next Generation EAS alert delivery system, EAS Participants must configure their networks to receive CAP-formatted alerts delivered pursuant to such delivery system, whether wireline, Internet, satellite or other, within 180 days after the date that FEMA announces the technical standards for such Next Generation EAS alert delivery."[128] The Commission incorporated this obligation into section 11.56, which provides that "all EAS Participants must be able to receive CAP-formatted EAS alerts … after FEMA publishes the technical standards and requirements for such FEMA transmissions."[129]

43. Commenter Gary E. Timm (Timm) contended that the Part 11 rules are not clear regarding the obligation of EAS Participants to receive CAP-formatted alerts from Next Generation EAS platforms. Specifically, Timm asserted, "It is unclear whether the terms 'receive CAP-formatted EAS alerts' and 'FEMA transmissions' [in section 11.56] are meant to allude to implemented FEMA Next Generation EAS delivery systems."[130] According to Timm, "As it stands now, most EAS Participants interpret that section §11.56 requires only that they acquire the ability to decode a CAP message with no reference as to its possible origin."[131] Timm stated that "if the Commission truly intends to require EAS Participants to implement any Next Generation EAS delivery systems within 180 days of FEMA adopting them it should be more clearly stated."[132]

44. We believe that the language from the *Second Report and Order* regarding receipt of CAP-formatted messages from Next Generation EAS delivery systems was intended to put EAS Participants on notice that, should FEMA adopt technical standards covering delivery of CAP-formatted messages to EAS Participants over specific platforms, such as satellite systems, EAS Participants would ultimately need to configure their systems to be able to interface with such systems to meet their existing obligation to process CAP-formatted messages. The need to specify such technical standards may never arise. The Commission's intent was not to permit FEMA to create or modify existing requirements via publication or adoption of a technical standard. Rather, the Commission's general intent was to revise the existing Part 11 rules to permit initiation and carriage of CAP-based alert messages over the existing EAS, subject to the technical requirements and limitations of the existing EAS, until such time as the Next Generation EAS has been fully deployed. Whatever obligations may arise with respect to the Next Generation EAS will be addressed in future proceedings. We seek comment on whether further clarification of the EAS Participants' obligation to receive and process CAP-formatted EAS messages delivered over Next Generation EAS distribution systems is necessary. In particular, is there a need to codify our interpretation to prevent any confusion that may exist concerning the above-quoted language in the *Second Report and Order* addressing Next Generation EAS distribution platforms?

[128] *Id*.

[129] *See* 47 C.F.R. § 11.56.

[130] Timm Reply Comments at 2-3.

[131] *Id*. at 3.

[132] *Id*.

4. Equipment Requirements

45. *Intermediary Devices*. Various parties responding to the *Part 11 Public Notice* suggested that EAS Participants be allowed to meet their obligation to receive and process CAP messages by deploying intermediary devices that essentially would carry out the function of receiving and decoding a CAP-formatted message, and translating and encoding such message into a SAME-formatted message that could then be inputted into a legacy EAS device via its audio port (just as an over-the-air SAME-formatted message would be) for broadcast over the EAS Participant's transmission platform. SpectraRep, for example, urged that the equipment requirements we impose on EAS Participants to meet the CAP obligations be permitted to "include an integrated CAP receiver/EAS encoder-decoder, or an additional CAP receiver interface module to an existing EAS encoder-decoder."[133] It appears that, depending upon the legacy EAS devices that an EAS Participant has deployed, use of such an intermediary device may provide a cost-effective method for an EAS Participant to meet its obligations to receive and convert CAP-formatted messages into the SAME format without having to replace its existing EAS equipment.

46. We seek comment on whether EAS Participants should be permitted to meet their CAP-related obligations by deploying such intermediary devices. We observe that these devices would appear to receive a CAP-based alert and encode it into a SAME-formatted message that is fed into the audio input of the EAS Participant's legacy EAS equipment, just as if that message had been received over-the-air from another station. Accordingly, we also seek comment on whether we should subject intermediary devices to some or all of the encoder requirements set forth in section 11.32 and the transmission requirements in section 11.51. Is there any reason to treat these devices differently from an EAS decoder that decodes both SAME and CAP-formatted messages? Specifically, should we subject intermediary devices to some or all of the decoder requirements set forth in section 11.33 and the monitoring requirements in section 11.52? Are there any requirements not currently specified in Part 11 to which we should subject intermediary devices?[134]

47. Do intermediary devices have the same capacity as new CAP-compliant equipment designed to replace legacy EAS devices to be modified via software or firmware to accommodate future changes to CAP, the SAME protocol, or changes to other Part 11 requirements? Would use of intermediary devices provide a cost-effective and efficient method for EAS Participants, including those that qualify as small businesses,[135] to meet the CAP-related obligations addressed in this item? Would EAS Participants deploying intermediary devices likely have to replace such devices with new CAP-compliant equipment sooner than EAS Participants that deployed new CAP-compliant equipment to begin with? What, if any, approximate cost savings (including on a percentage basis) would result from deploying an intermediary device instead of replacing legacy EAS equipment with new CAP-compliant EAS equipment? What are the cost and benefits associated with the use of intermediary devices? How could any requirements we might consider regarding intermediary devices be tailored to impose the least

[133] SpectraRep Comments at 3. *See also* Sage Comments at 5 ("Some manufacturers may choose to provide the CAP portion of their system in one unit, and the EAS portion in a separate unit."); TFT Reply Comments at 3 (agreeing with Spectralink that "CAP compliance for an EAS Participant can be achieved with either a single unit that receives both CAP and EAS messages or with a unit that receives CAP only and can be added to an existing FCC Type Notified EAS decoder or EAS combined encoder/decoder").

[134] In Section III.C of this item, we seek comment on whether intermediary devices should be subject to the Commission's certification rules. *See infra* para. 104.

[135] A description of "small business" is contained in the Initial Regulatory Flexibility Analysis in Appendix B of this item.

amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

48. *Encoder Requirements*. The functional requirements for EAS encoders are set forth in section 11.32.[136] As discussed below, CSRIC and parties responding to the *Part 11 Public Notice* made various CAP-related recommendations for revising these requirements. We seek comment on these recommendations generally and on any of the encoder requirements not addressed below that commenters believe we should revise to accommodate CAP.

49. *Section 11.32(a)*. Section 11.32(a) specifies the minimum requirements for encoders.[137] This section requires that encoders be capable of encoding the EAS Protocol set forth in section 11.31, providing the EAS code transmission requirements described in section 11.51, and meeting various other specifications.[138] CSRIC recommended that the Commission "[m]odify [the] EAS encoder minimum requirement," so that "EAS encoder[s] [are] capable of [r]endering a fully CAP compliant message."[139] We seek comment on this proposal.

50. To the extent that CSRIC is proposing that EAS encoders be required to be capable of encoding a CAP-formatted message (*i.e*., originating or somehow transmitting a message in the CAP format as opposed to the SAME format), we seek comment on whether such a requirement would be necessary or appropriate. As discussed above, we have tentatively concluded that the scope of the CAP-related Part 11 rule changes under consideration in this item involve ensuring that EAS Participants are capable of receiving CAP-formatted messages and transmitting a SAME-compliant message to the public (and, where applicable and feasible,[140] encoding in SAME for rebroadcast). Some EAS Participants originate (encode) SAME-formatted messages because they can be disseminated to the public over their transmission facilities as well as to other EAS Participants via the daisy chain process.[141] By contrast, CAP messages are essentially IP-based data files that cannot be transmitted in this fashion using the current transmission process. We seek comment on whether there is utility in asking EAS Participants to originate (or encode) messages in the CAP format.

51. *Section 11.32(a)(2)*. Section 11.32(a)(2) specifies the input configuration requirements for encoders.[142] This section currently requires that encoders be configured with two inputs: one for audio messages and one for data messages (RS–232C with standard protocol and 1200 baud rate).[143] CSRIC recommended that the Commission modify the input requirements to "[i]nclude [a] requirement for a single Ethernet input with support for multiple IP sources."[144] Although CSRIC did not indicate specifically whether we should retain the 1200 baud RS-232C input requirement, Trilithic, Inc. (Trilithic),

[136] *See* 47 C.F.R. § 11.32.

[137] *See id*. § 11.32(a).

[138] *See id*.

[139] *CSRIC Final Report*, § 5.1.

[140] *See supra* note 97.

[141] This process involves modulating data along with an audio signal onto the EAS Participant's main RF transmission signal.

[142] *See* 47 C.F.R. § 11.32(a)(2).

[143] *See id*.

[144] *CSRIC Final Report*, § 5.1.

suggested that we should "[r]emove the requirement for 1200 BAUD RS-232C interface" with respect to both the input configuration requirements and the output configuration requirements set forth in section 11.32(a)(3).[145]

52. We seek comment on these proposals. As a preliminary matter, if we were to decide not to require EAS Participants to encode messages in CAP format, would there be any reason to require that an encoder be configured with an Ethernet port? If so, would a single Ethernet port be sufficient to capture data streams from multiple sources and distribution platforms? Are there any other types of interface ports that it would be appropriate to require be included in these devices to maximize their ability to accommodate various data inputs, such as a USB port? Would an Ethernet port permit receipt of CAP messages over a dial-up modem (for instances in which broadband Internet access is not available)? Assuming we require inclusion of an Ethernet and/or other data ports, would there be any utility to retaining the RS232C connector and 1200 baud rate specifications, or should we delete these altogether? Should any configuration requirements we adopt for encoder inputs also be applied to encoder outputs? Would requiring an Ethernet and/or USB port(s), with the RS232C connector and 1200 baud rate or some other specifications, be a cost-effective means of ensuring a data-reception capability in EAS encoders, or are there alternative approaches less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? What are the cost and benefits associated with requiring the inclusion of Ethernet or other data ports in encoders? How could any requirements we might consider with respect to encoder inputs be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

53. *Decoder Requirements*. The functional requirements for EAS decoders are set forth in section 11.33.[146] As discussed below, CSRIC and parties responding to the *Part 11 Public Notice* made various CAP-related recommendations for revising these requirements. We seek comment on these recommendations generally and on any of the decoder requirements not addressed below that commenters believe we should revise to accommodate CAP.

54. *Section 11.33(a)*. Section 11.33(a) specifies the minimum requirements for decoders.[147] This section requires that decoders be capable of decoding the EAS Protocol set forth in section 11.31, providing the EAS monitoring functions set forth in section 11.52, and meeting various other specifications.[148] Although not raised specifically by CSRIC or others, we seek comment on whether the minimum requirements for decoders in this section should include the capability to decode CAP-formatted messages and convert them into SAME protocol-compliant messages, as set forth in section 11.56 and whether this requirement can be met through the deployment of an intermediary device. The fundamental purpose of decoders is processing EAS messages, whether formatted in the SAME or CAP protocols, and adding CAP reception to section 11.33(a) will put CAP on the same footing as SAME. We seek comment on this proposal. Is direct regulation, in this case specifying CAP-to-SAME conversion as a minimum requirement for decoders, necessary to ensure decoder compliance or is there an alternative approach that would achieve the same end? What are the cost and benefits associated with requiring decoders to carry out CAP-to-SAME conversion? How could any requirements we might consider regarding CAP-to-SAME conversion be tailored to impose the least amount of burden on those affected?

[145] Trilithic, Inc., Comments, EB Docket 04-296 (filed May 17, 2010) at 4 (Trilithic Comments).

[146] *See* 47 C.F.R. § 11.33.

[147] *See id*. § 11.33(a).

[148] *See id*.

To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

55. *Section 11.33(a)(1)*. Section 11.33(a)(1) specifies the input configuration requirements for decoders.[149] This section currently requires that decoders be configured with three inputs: two for audio messages (from EAS monitoring assignments) and one for data (RS–232C with standard protocol and 1200 baud rate).[150] CSRIC recommended that the Commission "[a]dd Ethernet input and multiple IP source requirements."[151] As in the case of encoders, CSRIC did not indicate specifically whether we should retain 1200 baud RS-232C input requirements; however, Trilithic suggested that we should remove them with respect to both the input and output configuration requirements set forth in section 11.33(a)(7).[152]

56. We seek comment on these proposals. Is there any reason to require that a decoder be configured with an Ethernet port? If so, would a single Ethernet port be sufficient to capture data streams from multiple sources and distribution platforms? Are there any other types of interface ports that it would be appropriate to require be included in these devices to maximize their ability to accommodate various data inputs, such as a USB port? Would an Ethernet port permit receipt of CAP messages over a dial-up modem (for instances in which broadband Internet access is not available)? Assuming we require inclusion of an Ethernet and/or other data ports, would there be any utility to retaining the RS232C connector and 1200 baud rate specifications, or should we delete these altogether? Should any configuration requirements we adopt for decoder inputs also be applied to decoder outputs? Would requiring an Ethernet and/or USB port(s), with the RS232C connector and 1200 baud rate or some other specifications, be a cost-effective means of ensuring a data-reception capability in EAS decoders, or are there alternative approaches less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? What are the cost and benefits associated with requiring the inclusion of Ethernet or other data ports in decoders? How could any requirements we might consider with respect to decoder inputs be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

57. *Section 11.33(a)(4)*. Section 11.33(a)(4) specifies certain visual display and logging requirements for decoders.[153] This section currently requires, among other things, the development of visual display information from header codes, including the originator, event, location, valid time period of the message, and the local time it was transmitted.[154] This section also requires that existing and new models of EAS decoders manufactured after August 1, 2003, provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events.[155] Sage suggested, "If the message was derived from CAP, the contents of the Alert Text, assembled as defined

[149] *See id*. § 11.33(a)(1).

[150] *See id*.

[151] *CSRIC Final Report*, § 5.1.

[152] *See* Trilithic Comments at 4.

[153] *See* 47 C.F.R. § 11.33(a)(4).

[154] *See id*.

[155] *See id*.

by the [ECIG] Implementation Guide, should be added to the log."[156] We seek comment on this proposal. What are the potential costs and benefits of this proposal? Would this proposal represent a cost-effective means for recording CAP-formatted alerts, and is it necessary to codify CAP message logging, or are there alternative approaches less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result?

58. *Section 11.33(a)(10)*. Section 11.33(a)(10) specifies certain error detection and message validation requirements for decoders.[157] This section currently requires, among other things, that decoders not relay duplicate messages automatically.[158] CSRIC recommended that this section be revised "to handle duplicate messages [where one is CAP-formatted] and use [the] CAP message by default," as specified in the ECIG Implementation Guide.[159]

59. We seek comment above on whether EAS Participants will be required to translate CAP-formatted messages into SAME-compliant messages in conformance with the ECIG Implementation Guide within whatever time period we may establish in this proceeding.[160] We are also seeking comment below on whether and how we should incorporate such conformance into the Commission's equipment certification process.[161] The duplication concerns raised by CSRIC are addressed in the ECIG Implementation Guide, with which EAS devices may be required to conform. We tentatively conclude that, no revisions to section 11.33(a)(10) would be required if we were to require EAS Participants to translate CAP-formatted messages into SAME-formatted messages in conformance with the ECIG Implementation Guide. We seek comment on this tentative conclusion.

60. *Section 11.33(a)(11)*. Section 11.33(a)(11) specifies that a header code with the EAN event code that an EAS Participant receives through any of the audio inputs must override all other messages.[162] Although not raised by CSRIC or the parties responding to the *Part 11 Public Notice*, we seek comment as to whether we should update this provision to include CAP-formatted messages received through a non-audio input, as EAS Participants will not receive CAP-formatted messages through the audio port. Is such an amendment to our rules necessary? What are the potential costs and benefits of such an amendment? Is there an alternative approach that would be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result?

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[156] Sage comments at 10. Sage also asserted with respect to section 11.34(a)(4) that "[w]hen used to generate radio text or a video crawl, the CAP Alert Text should be used instead of the information from the EAS fields," although it is not clear whether section 11.34(a)(4) applies. *Id*.

[157] *See* 47 C.F.R. § 11.33(a)(10).

[158] *See id*.

[159] *CSRIC Final Report*, § 5.1. *See also* Sage Comments at 10 ("To maintain the integrity of the legacy EAS system, Part 11 should be updated to contain language requiring the detection of duplicate messages, no matter if they are originally heard in the EAS domain, the CAP domain, or have been translated from CAP to EAS and broadcast.").

[160] *See supra* para. 35.

[161] *See infra* paras. 94-100.

[162] *See* 47 C.F.R. § 11.33(a)(11).

5. Miscellaneous Rule Changes Related to Fully Implementing CAP

61. *Section 11.1*. Section 11.1 specifies the purpose of the EAS.[163] Among other things, this section provides that "[t]he EAS may be used to provide the heads of State and local government, or their designated representatives, with a means of emergency communication with the public in their State or Local Area."[164] CSRIC recommended that we update this section "to include new CAP related alert originators."[165] CSRIC further explained, "Additional originators are tribal, territorial, and [state governors (or their designees)]."[166] We seek comment on whether such action is necessary or whether the language currently in section 11.1 is broad enough to capture these entities so that EAS Participants may or must carry their alert messages.[167]

62. *Section 11.11*. Section 11.11 identifies the various categories of EAS Participants and specifies their minimum equipment deployment and audio/visual message transmission obligations.[168] Various parties suggested that we incorporate the obligation to receive CAP-formatted messages into the minimum requirements for EAS Participants set out in section 11.11(a). CSRIC, for example, asserted that "the requirement for receiving and decoding CAP originated messages . . . also necessitates adding CAP reception in the definition of minimum requirements for EAS Participants."[169] CSRIC also stated that the "'EAS Equipment Requirement' tables need to be revised to reflect the range of new CAP EAS equipment necessary for the monitoring, reception, decoding, and video/audio display of alerts," and recommended more generally that that we "[u]pdate [section 11.11] to include [a] reference for interface requirements to IPAWS source."[170] SpectraRep suggested, "Under § 11.11(a) the addition of a requirement for receiving and decoding CAP originated messages[], also necessitates adding CAP reception in the definition of minimum requirements for EAS Participants."[171] TFT urged that we revise the analog and digital broadcast station equipment deployment table in section 11.11(a) "to list CAP reception and decoding requirement … in accordance with § 11.56 of this part."[172]

63. We note at the outset that the reference to "analog television broadcast stations" is obsolete in light of the fact that since June 13, 2009, all full-power U.S. television stations have broadcast over-the-air signals in digital only and seek comment on whether we should delete the reference to "analog television broadcast stations" from section 11.11. We further seek comment on suggestions that incorporating CAP-compliance into section 11.11 would further our goal of fully codifying the CAP-

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[163] *See* 47 C.F.R. § 11.1.

[164] *Id*.

[165] *CSRIC Final Report*, § 5.1.

[166] *Id.* Issues associated with the obligation to receive CAP-formatted messages originated by State governors are addressed in section III.E of this item.

[167] We also observe that the issue of whether we should allow local, county, tribal, or other state governmental entities to initiate mandatory CAP-formatted state and local alerts was raised in the *Next Generation EAS FNPRM* and will be addressed in that proceeding. *See Next Generation EAS FNPRM*, 22 FCC Rcd 13275, 13307-08, para. 74.

[168] *See* 47 C.F.R. § 11.11.

[169] *CSRIC Final Report*, § 5.1

[170] *Id*.

[171] SpectraRep Comments at 2.

[172] TFT Comments at 2.

related obligations into Part 11. Specifically, we seek comment on whether we should amend the text of section 11.11(a) to include as a minimum requirement compliance with the CAP-related requirements in section 11.56.

64. With respect to amending the various equipment requirement tables in section 11.11 to incorporate CAP-related obligations, we observe that the purpose of these tables is to identify the type of equipment (encoder and/or decoder) that specified EAS Participants must deploy, along with their obligations to transmit audio and/or video messages, and the effective dates that apply to these obligations.[173] The equipment deployment obligations are not changing due to CAP, and any CAP-related requirements specific to EAS encoders and decoders will be incorporated into the Part 11 sections addressing these devices (specifically, sections 11.32 and 11.33). We are, however, seeking comment on whether to allow EAS Participants to meet their obligations to receive and translate CAP-formatted messages by deploying intermediary devices that would interface with their existing deployed legacy EAS equipment. Accordingly, we seek comment on whether, for CAP purposes, we should amend the equipment deployment tables in section 11.11 by adding a footnote to the "EAS decoder" entries in the tables, indicating that EAS Participants may elect to meet their obligation to receive and translate CAP-formatted messages by deploying an intermediary device in addition to the EAS decoder used to decode messages transmitted in the EAS Protocol.

65. We also observe that all of the effective dates identified in the equipment deployment tables in section 11.11 have long expired, and thus their inclusion in the rule text appears superfluous. Moreover, because these dates have passed, some equipment deployment obligations that once were staggered among EAS Participants now apply equally to all of them. For example, all EAS Participants are required to deploy a decoder. The two-tone encoder entry in the table covering analog and digital broadcast stations appears similarly stale and indistinguishable from the general encoder deployment obligations. Accordingly, we seek comment on whether we should delete the date references in the equipment deployment tables in section 11.11 (as well as cross-references to these dates in other sections of Part 11, such as section 11.51(c) and (d)), along with the entry for two-tone encoders. Is such a clarifying amendment necessary? We also seek comment on whether the equipment deployment tables covering analog, wireless, and digital cable and wireline video systems can be combined into a single table, as well as any other revisions we could make to section 11.11 to streamline it and make it easier to follow.

66. In addition, parties responding to the *Part 11 Public Notice* recommended that we amend section 11.11 to reflect the CAP monitoring obligations in section 11.52(d). TFT, for example, asserted that "for all EAS participants, the Table [in section 11.11(a)] needs to be revised to list … a requirement to monitor CAP servers as defined by State and Local Area plans and in accordance with § 11.56 of this part."[174] We seek comment on whether we should incorporate monitoring requirements or references thereto into section 11.11. Is such a change necessary? Our rules already require decoders to meet the monitoring requirements in section 11.52, and we are seeking comment on incorporating CAP monitoring into that section. This would mean that the basic requirement to deploy a decoder (or intermediary device) necessarily would trigger CAP monitoring obligations. We seek comment on this proposal.

67. We seek comment on whether our proposed approaches for section 11.11 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed amendments necessary? What are their potential costs and benefits? How could any requirements we might consider

[173] *See* 47 C.F.R. § 11.11.

[174] TFT Comments at 2. *See also* Monroe Reply Comments at 1; SpectraRep Comments at 3.

with respect to amending section 11.11 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

68. *Section 11.20*. Section 11.20 generally describes the functions and architectural elements of state relay networks.[175] Among other things, this section provides that state relay networks distribute "State EAS messages" and may be composed of "any … communications facilities" and that "any … communications technology may be used to distribute State emergency messages."[176] CSRIC recommended that we update section 11.20 "to accommodate the relay of CAP originated messages to EAS participants via the addition of state CAP relay networks."[177] Some parties responding to the *Part 11 Public Notice* also suggested changing the language in this section to reference CAP sources and networks.[178] We seek comment on whether the existing language of section 11.20 requires a specific reference to CAP because its language broadly covers "EAS messages," which could be in the SAME or CAP formats and distributed over "any" communications facility and/or technology.

69. In addition, SpectraRep suggested that we incorporate a requirement into section 11.20 that EAS participants "monitor at least one state and/or local CAP server."[179] While monitoring state CAP messages might involve the state relay network in a given state, it may not apply to all states, because states may deploy differently architected CAP systems. As discussed above, we have tentatively concluded that EAS Participants must monitor the RSS feed(s) used by a state's EAS system as the source of governor-originated CAP messages (provided such CAP system is described in the state's EAS Plan submitted to and approved by the Commission).[180] Accordingly, we seek comment on whether we need to incorporate CAP monitoring into section 11.20.

70. We seek comment on whether our proposed approaches for section 11.20 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed amendments necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending section 11.20 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

71. *Section 11.21*. Section 11.21 generally specifies the contents of State and Local Area EAS Plans and the FCC Mapbook.[181] Among other things, section 11.21(a) indicates that such plans should identify the "monitoring assignments and the specific primary and backup path for the EAN from

[175] *See* 47 C.F.R. § 11.20.

[176] *Id*.

[177] *CSRIC Final Report*, § 5.1.

[178] *See*, *e.g.*, TFT Comments at 3; SpectraRep Comments at 3; Timm Reply Comments at 1; Monroe Reply Comments at 1.

[179] SpectraRep Comments at 3.

[180] As noted above, the issue of whether local, county, tribal, or other state governmental entities should be allowed to initiate mandatory CAP-formatted state and local alerts will be addressed in the item responding to the *Next Generation EAS FNPRM*. *See supra* note 167. Accordingly, we do not address the issue of monitoring local CAP sources in this item.

[181] *See* 47 C.F.R. § 11.31(a)-(c).

the PEP to each station in the plan."[182] With respect to this section, CSRIC recommended that we "[i]nclude language on EAN distribution via IPAWS."[183]

72. In contrast to the distribution of SAME-formatted EANs, which are relayed from station-to-station using the same distribution chain that states use for transmitting intra-state SAME-formatted messages, under our tentative proposal for CAP monitoring, EAS Participants will obtain CAP-formatted EAN messages from RSS feeds that they are required to monitor and may receive state CAP-based EAS alerts from RSS feeds as well. We have tentatively proposed to specify this monitoring arrangement in section 11.52 (which would be cross-referenced in section 11.56). To prevent any confusion on this point, we tentatively conclude that we should revise the language in section 11.21(a) to make clear that the State Area EAS Plans specify the monitoring assignments and the specific primary and backup path for SAME-formatted EANs and that the monitoring requirements for CAP-formatted EANs are set forth in section 11.52. We seek comment on this tentative conclusion. Is such a clarifying amendment necessary?

73. CSRIC also recommended that the "'State and Local Area plans and FCC Mapbook' should be updated to include CAP."[184] With respect to the State Area EAS Plan requirements in section 11.21(a), we observe that this section specifies that these plans must describe "how state-level and geographically targeted EAS messages initiated by a state governor … will be transmitted to EAS Participants" in order to trigger the obligation to process CAP-formatted messages initiated by state governors but does not specify that the obligation applies to CAP-formatted messaging.[185] The same omission also occurs in section 11.55(a), which specifies that "[a]ll EAS Participants within a state (excepting SDARs and DBS providers) must receive and transmit state-level and geographically targeted EAS messages, as aggregated and delivered by the state governor" but fails to make clear that the EAS messages at issue are CAP-formatted EAS messages.[186] These were inadvertent omissions, and we tentatively conclude that we should amend the text of both sections to make clear that they apply to CAP-formatted EAS messages. We seek comment on this tentative conclusion.

74. As described in section 11.21(c), the FCC Mapbook is based upon the State and Local Area EAS plans and "organizes all broadcast stations and cable systems according to their State, EAS Local Area, and EAS designation."[187] We seek comment on whether and, if so, how we should revise the FCC Mapbook content requirements to identify federal and state CAP message origination and distribution.[188] Would such a revision be useful or necessary? Are State and Local EAS Plans

[182] 47 C.F.R. § 11.31(a). EAS Participants are required to monitor the stations identified in the state plan for federal EAS message purposes under sections 11.52(d) and 11.54(b)(1), 47 C.F.R. §§ 11.52(d), 11.54(b)(1).

[183] *CSRIC Final Report*, § 5 .1.

[184] *Id*. *See also* TFT Comments at 3.

[185] 47 C.F.R. § 11.21(a).

[186] 47 C.F.R. § 11.55(a). *See also* Timm Comments at 3; NAB Reply Comments at 8.

[187] 47 C.F.R. § 11.21(c).

[188] As noted above, we will address the issue of whether local, county, tribal, or other state governmental entities should be allowed to initiate mandatory CAP-formatted state and local alerts in the item responding to the *Next Generation EAS FNPRM*. *See supra* note 167. Accordingly, we do not take up the issue of whether we should update the Local Area EAS Plan to incorporate CAP messaging in this item. In any event, the current language in section 11.21(b) appears broad enough to capture whatever form of messaging a locality might use for its emergency alerting system. *See* 47 C.F.R. § 11.21(b) ("The Local Area plan contains procedures for local officials or the NWS to transmit emergency information to the public during a local emergency using the EAS.").

sufficiently specific or reliably updated at sufficiently regular intervals to be accurately reflected in the latest version of the FCC Mapbook?[189]

75. As a separate matter, Timm asserted with respect to section 11.21(c) that "rather than generating a list of each individual station in the state, a simple representation of how the EAN is distributed from the PEP/NP to the PN/NN stations in the state (usually via the SP to the SR to the LP) is adequate to demonstrate what the Commission is interested in documenting."[190] We seek comment on Timm's proposal, including whether such an approach would be useful. We observe, however, that any State Area EAS Plan drafted according to Timm's recommendations would lack the data to enable the Commission to assemble a mapbook beyond the LP level and would not include information concerning many EAS Participants, including all cable providers. We also observe that the *National Test Order* requires EAS Participants to submit various test data to the Commission, including identification of the monitored station whose EAS broadcast was decoded, which might aid in preparing accurate information on EAS monitoring assignments.[191]

76. We seek comment on whether our proposed approaches for section 11.21 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed amendments necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending section 11.21 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

77. *Section 11.31(a)(3)*. Section 11.31(a) specifies the components of an EAS message that comprise the EAS Protocol.[192] Section 11.31(a)(3) states that the actual message "may be audio, video or text."[193] TFT asserted that "the provision for video or text in [section 11.31(a)(3)] is no longer necessary" because "CAP messages have the ability to contain video, audio, graphics and text [and] CAP receiving equipment may (optionally) have additional features such as text-to-speech."[194] As discussed above, we have tentatively concluded that we should not change the output elements of the EAS Protocol but rather should revise the Part 11 rules to ensure that CAP-formatted messages are converted into the existing EAS Protocol.[195] We also seek comment on TFT's proposal, which is premised upon changing the EAS Protocol to accommodate CAP's capabilities. What are the potential costs and benefits of this proposal? How could any requirements we might consider be tailored to impose the list amount of burden on those

[189] *See*, *e.g.*, Abbott-Gutierrez Comments at 1 (indicating that preparing a "Mapbook for the Nevada Operational Area … was a difficult and time-consuming process"; that "[t]he list of stations is probably incomplete and needs updating almost daily"; and that "[o]ther state chairs have told me that they do not have the time to dedicate to such an arduous task").

[190] Timm Reply Comments at 3. *See also* Abbott-Gutierrez Comments at 1 (suggesting that "perhaps the [Media Bureau's Consolidated Database System (CDBS) electronic filing system for Broadcast Station Application Forms] could be enhanced with a few, simple programming additions to automatically present the information a station needs to know to be compliant with EAS rules and regulations.").

[191] *See National Test Order*.

[192] *See* 47 C.F.R. § 11.31(a).

[193] *Id*. § 11.31(a)(3).

[194] TFT Comments at 4.

[195] *See supra* para. 28.

affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

78. *Section 11.35(a)*. Section 11.35(a) specifies certain operational readiness requirements for EAS equipment.[196] This section currently requires, among other things, that EAS Participants install EAS equipment so that the monitoring and transmitting functions are available during the times that the EAS Participants' stations and systems are in operation, that EAS Participants determine the cause of any failure to receive the required tests or activations during tests, and that EAS Participants make appropriate log entries indicating reasons why they did not receive any tests.[197] CSRIC recommended that we update this section "to include the CAP receiving requirement."[198] We observe that the obligation to receive CAP is specified in 11.56, and we have tentatively proposed to include this as a minimum requirement in several other rule sections. Accordingly, we tentatively conclude that it is unnecessary to include a CAP-receiving requirement in section 11.35(a). We seek comment on this tentative conclusion.

79. *Section 11.45*. Section 11.45 prohibits false or deceptive EAS transmissions. This provision specifies that "[n]o person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized test of the EAS."[199] CSRIC recommended that we "[m]odify [the] Prohibition to reference CAP 'Actual' status indicators" and noted that the "actual" status for CAP messages is defined in the ECIG Implementation Guide.[200] We are seeking comment on whether to require all EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide. Should we decide to require all EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide, any restrictions in the Guide against broadcasting CAP-formatted messages would apply.[201] Beyond that, the language of section 11.45 prohibiting false or deceptive EAS transmissions applies regardless of whether such transmissions were initiated by a CAP-formatted message or a SAME-formatted message. We seek comment on whether we should make any revisions to section 11.45 to accommodate CAP-formatted messages. What are the potential costs and benefits of any recommendations? How could any requirements we might consider with respect to requiring all EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

80. *Section 11.51*. Section 11.51 specifies EAS code and Attention Signal transmission requirements.[202] This section currently lists, among other things, certain basic encoder requirements for the various classes of EAS Participants.[203] For example, sections 11.51(g)(1), (h)(1), (i)(1), and (j)(1) require that the applicable EAS Participants must, among other things, "install, operate, and maintain equipment capable of generating the EAS codes."[204] CSRIC recommended changing this language to

[196] *See* 47 C.F.R. § 11.35(a).

[197] *See id*.

[198] *CSRIC Final Report*, § 5.1. *See also* TFT Comments at 6; SpectraRep Comments at 3.

[199] 47 C.F.R. § 11.45.

[200] *CSRIC Final Report*, § 5.1.

[201] *See* ECIG Implementation Guide, §§ 3.9, 4.

[202] *See* 47 C.F.R. § 11.51.

[203] *See id*.

[204] *See* 47 C.F.R. § 11.51(g)(1), (h)(1), (i)(1), (j)(1).

state that "[e]quipment must be capable of rendering a CAP compliant message to EAS[,] [a]s opposed to simply generating an EAS code."[205]

81. As discussed above, we have tentatively concluded that EAS Participants should only be required at this time to be capable of retrieving CAP-formatted Federal EAS alerts from RSS feeds and converting them into SAME-compliant messages for transmission to the public (and, as applicable and technically feasible,[206] encoding them in SAME for rebroadcast).[207] Assuming that EAS Participants are not required to encode EAS messages in the CAP format, there would appear to be no basis for revising section 11.51 to require EAS Participants to transmit (or "render") a CAP-compliant message. Accordingly, we tentatively conclude that we should not adopt CSRIC's recommendation to include "rendering a CAP message" in section 11.51. We seek comment on this tentative conclusion.

82. Sections 11.51(d), (g)(3), (h)(3), and (j)(2) establish when EAS Participants must transmit visual EAS messages – typically aired in the form of a video crawl – and requires that such messages contain the originator, event, location, and the valid time period of the EAS message.[208] Timm recommended that we "add a note in the above sections stating that for assembling the visual message the Originator, Event, Location and valid time period of the EAS alert may be derived from pertinent fields within the CAP message, as opposed to being required to be derived only from the EAS header code."[209] According to Timm, "With the advent of CAP messaging, EAS Participants will now have the availability of more descriptive alert information than the generic information derived from the EAS header code."[210]

83. As discussed above, we have tentatively concluded that, as long as FEMA is using CAP solely to activate SAME-based alerts over the current EAS, we will only require EAS equipment to produce a SAME-compliant output. While we appreciate the fact that CAP allows for the delivery of more detailed and varied information than the SAME protocol, our tentative view is that during the interim period until the Next Generation EAS is fully implemented, the message that EAS Participants transmit to the public should be uniformly consistent whether it is originated in SAME or CAP. Allowing EAS Participants to derive some messages from CAP data fields that do not correlate to SAME data fields could result in inconsistencies in the alerts disseminated to the public and potentially result in confusion.[211] In this regard, we observe that the primary purpose of the ECIG Implementation Guide is to

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[205] *CSRIC Final Report*, § 5.1.

[206] *See supra* note 97.

[207] *See supra* para. 35.

[208] *See* 47 C.F.R. § 11.51(d), (g)(3), (h)(3), (j)(2).

[209] Timm Comments at 9. *See also* Sage Comments at 9-10 (recommending that the Part 11 rules "allow messages received via CAP to be rendered to text without the caned EAS header-derived information" pursuant to the specifications in the ECIG Implementation Guide); Monroe Comments at 6 (observing that "CAP also provides non-standardized (written) textual details about the event and associated locations … needed for making sensible alerts out of certain warnings and Emergencies" and asking whether "the current machine translation [should] remain a requirement, in addition to the CAP descriptive text, or can the basic auto-generated text be skipped in favor of just the CAP descriptive text").

[210] *Id*.

[211] For this reason, we also decline to take up requests to make text-to-speech a required element of CAP-capable EAS devices. Monroe, for example, observed that because CAP can only provide audio by referencing a URL streaming source or including an audio file, there could be "significant opportunity [] for producing an alert without the associated audio." Monroe Comments at 3. Monroe asserts that requiring "Text to Speech" for CAP-certified devices could "be used as a back-up in the event no other audio source is available." *Id*. at 3-4. As TFT observes, (continued….)

ensure consistency across devices and delivery platforms in how EAS Participants decode CAP-formatted messages and present them to the public.[212] As the ECIG Implementation Guide explains, the need for precise translation of CAP into SAME is also necessary to prevent disruptions to EAS Participant operations:

> All CAP-to-EAS devices MUST generate the EXACT same EAS message for a given CAP message. To do otherwise could result in EAS messages for the same CAP alert that would not be detected as duplicates, resulting in multiple interruptions to broadcasters.[213]

84. We also observe, however, that the ECIG Implementation Guide provides procedures for the CAP-formatted message video crawl translation to include not only the EAS codes required under the Part 11 rules, but also additional text relating to the event that presumably would provide more information to alert message viewers.[214] This means that the video crawl developed from a CAP-formatted message could contain elements that are identical to the video crawl developed from an identical SAME-formatted message, and thus would appear to be compliant with the requirements in section 11.51, but would include additional alert-related text, and thus be more descriptive.[215] Because we have tentatively concluded that we will not require EAS Participants to encode EAS messages (whether for initial broadcast or rebroadcast) in CAP format, this additional descriptive information would only be available to viewers of stations that received the CAP-formatted version of a given EAS alert messages and not to stations that receive the SAME-formatted version of such EAS alert message.

85. We seek comment on whether we should continue to use the SAME-based protocol codes as the baseline for deriving the visual EAS message requirements in section 11.51. As explained above, the video crawl procedures set forth in the ECIG Implementation Guide appear to allow an EAS Participant to provide more descriptive information.[216] Would there be any potential for confusion if the viewers in one area were presented with a video crawl developed from an EAS message received and formatted in SAME, while viewers in another area were presented with a video crawl developed from the identical EAS message received and formatted in CAP? Is there any likelihood of such an occurrence, given (i) that the default for processing identical SAME- and CAP-formatted EAS messages under the ECIG Implementation Guide is to process the CAP-formatted message;[217] and (ii) the restriction against processing duplicate messages?[218]

(Continued from previous page)
however, "Messages that are received in EAS protocol and not from CAP may not contain an audio message. Requiring 'Text-to-Speech' conversion could cause confusion and may not provide enough detail for radio listeners. Television and cable viewers may be similarly confused because a 'Text-to- Speech' requirement for a non-CAP message would only 'mirror' the visual information displayed and would not necessarily provide additional details." TFT Reply Comments at 7-8.

[212] *See* ECIG Implementation Guide, § 1.1.

[213] *Id*., § 3.1.

[214] *See id*., § 3.6.4.

[215] *See id*.

[216] According to ECIG, a video crawl can only display up to 1,800 characters of text due to equipment processing limitations and the audio time specifications for EAS messages. Therefore, even using the data supplied in CAP, there is a limit to how much information can be relayed in text format. *See id*. § 3.6.

[217] *See id*. § 3.11 ("If a CAP-to-EAS device receives an alert in the EAS domain, and it has a duplicate alert that has been received via CAP, but neither has yet aired, it SHOULD use the CAP version of the alert.").

[218] *See* 47 C.F.R. § 11.33(a)(10).

86. We seek comment on whether our proposed approaches for section 11.51 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending section 11.51 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

87. *Section 11.54*. Section 11.54 specifies the operational requirements that apply to EAS Participants during a national level emergency.[219] Section 11.54(b) lists the actions an EAS Participant must take upon receipt of an EAN.[220] CSRIC recommended that we add a new subparagraph to section 11.54(b) specifying that "EAS Messages will be broadcast only if the scope of CAP alert is 'Public'."[221] As discussed above, we have tentatively concluded that we will only require EAS equipment to produce a SAME-compliant output. We observe that there is no requirement in the EAS Protocol requirements, or more broadly, the Part 11 rules, to broadcast only "Public" EAS messages in the processing of SAME-formatted EAS messages. Moreover, the ECIG Implementation Guide already specifies that EAS Participants must ignore CAP-formatted messages with a value in the "scope" field other than "Public."[222] We are seeking comment on whether to require EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide. If we were to do so, any restrictions against processing CAP-formatted messages without the "Public" value in the scope field would be satisfied. We seek comment on whether to adopt CSRIC's recommendation to mandate that CAP-formatted messages be broadcast only if the scope of the alert is "Public."

88. CSRIC also recommended that we revise section 11.54(b)(1) to include IPAWS monitoring.[223] Section 11.54(b)(1) requires that, immediately upon receipt of an EAN, EAS Participants monitor the two sources identified in the State Area EAS Plan.[224] As discussed above, we have tentatively concluded that we will specify federal CAP monitoring requirements in section 11.52. In addition, we are seeking comment in section III.F of this item on several revisions to section 11.54 that would obviate this issue. To the extent that we retain section 11.54(b)(1) in the final rules that result from this proceeding, we seek comment regarding whether we should revise the language to reflect federal CAP monitoring obligations by adding a cross-reference to the monitoring requirements in section 11.52 or otherwise revise this section of the rules.

89. We seek comment on whether our proposed approaches for section 11.54 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending section 11.54 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

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[219] *See* 47 C.F.R. § 11.54.

[220] *See id*. § 11.54(b).

[221] *CSRIC Final Report*, § 5.1.

[222] *See*, *e.g.*, ECIG Implementation Guide, § 6.7, CAP to EAS Validation Table (entry for Alert Block <scope>). According to the ECIG Implementation Guide, the requirement to broadcast only "Public" messages was derived from CAP v1.2 Committee Draft OASIS Emergency Management Technical Committee, March 2010. *See id*.

[223] *See id*.

[224] *See* 47 C.F.R. § 11.54(b)(1).

C. EAS Equipment Certification

90. Section 11.34 of the Part 11 rules requires EAS encoders and decoders to be certified in accordance with the equipment authorization procedures set forth in Part 2, subpart J, of the Commission's rules.[225] Among other things, certification under Part 2 requires device testing to demonstrate compliance with the applicable specifications set forth in the Part 11 rules.[226] Telecommunications Certification Bodies (TCBs) typically perform these tests, which include testing for compliance with the provisions in sections 11.31, 11.32, and 11.33, as applicable.[227]

91. Unrelated to the Commission's certification program, FEMA has implemented an IPAWS Conformity Assessment Program (ICAP) for CAP products intended to interoperate with the IPAWS system.[228] Under this program, manufacturers submit software and/or hardware to FEMA's designated test laboratory for testing to ensure compliance with CAP v1.2 USA IPAWS Profile v1.0.[229] If the equipment passes, the test laboratory provides a final test report and template Supplier's Declaration of Conformity (SDoC) to the manufacturer, which may then post final versions of these documents on a designated web site for public inspection.[230] According to ICAP literature, the minimum time required to complete the ICAP testing process for a single device (assuming no problems arise during device testing) is between 6 and 8 weeks.[231]

92. As a threshold matter, CSRIC, along with several parties responding to the *Part 11 Public Notice*, proposed that CAP-compliant EAS equipment, and in particular the CAP-to-SAME formatting conversion, generally be subject to certification. CSRIC observed that the ICAP program "only provides verification of a project-specific CAP data format, and is therefore necessary for the IPAWS project, but not sufficient for the overall CAP-EAS endeavor."[232] More specifically, according to CSRIC, "The proper CAP-to-EAS translation function is not included in the [ICAP] conformance tests."[233] Thus, CSRIC advocates that "it is necessary that the FCC continue and extend its statutory role in EAS certification to CAP EAS devices."[234] To that end, CSRIC proposed that we amend section 11.34 to "[a]dd FCC certification for CAP EAS devices."[235] Similarly, Monroe stated that "[section] 11.34 should be amended to add a provision for FCC certification of CAP EAS devices, in line with current

[225] *See* 47 C.F.R. § 11.34.

[226] *See id*. § 11.34(a) ("The data and information submitted must show the capability of the equipment to meet the requirements of this part as well as the requirements contained in part 15 of this chapter for digital devices.").

[227] *See* 47 C.F.R. § 2.960(a).

[228] *See* https://www.nimssc.org/ipawsconform/default.asp.

[229] Specifically, under FEMA's ICAP, manufacturers submit software and hardware to the SAIC Incident Management Test and Evaluation Laboratory (IMTEL), located in Somerset, Kentucky. *See* https://www.nimssc.org/ipawsconform/faq.asp.

[230] The final reports for products that pass ICAP testing are eligible for posting on a Responder Knowledge Base (RKB) website (https://www.rkb.us/), which provides government officials and other end-users with access to product test results. *See id*.

[231] *See* https://www.nimssc.org/ipawconform/files/IPAWS-CA-Process.pdf.

[232] *CSRIC Final Report*, § 5.1.

[233] *Id*.

[234] *Id*.

[235] *Id*.

provisions for FCC certification of current EAS devices."[236] Timm contended that if FEMA's ICAP program is not going to test for compliance with the ECIG Implementation Guide, the "FCC should then require equipment conformance testing to the [ECIG] Implementation Guide criteria."[237]

93. Sage contended that "it is important to add conformance to the CAP protocol, IPAWS profile, and the [ECIG] Implementation Guide, to the Part 11 rules."[238] According to Sage, the ICAP SDoC "should become part of the Part 11 certification requirements, [such that] no device can be sold for the purpose of meeting the updated Part 11 requirements without an SDoC."[239] Sage added that "The SDoC should be filed with the rest of the Part 11 certification application in the normal manner."[240]

94. We seek comment on whether and how we should incorporate compliance with respect to CAP functionality into the Commission's existing certification scheme. There appear to be two CAP-related standards with which conformance could be certified: (i) CAP v1.2 USA IPAWS Profile v1.0; and (ii) the ECIG Implementation Guide. With respect to the former, we observe that while the CAP v1.2 USA IPAWS Profile v1.0 standard specifies requirements and guidelines for constructing a CAP v1.2 message that broadly complies with the EAS requirements, it does so in the context of sending a message through the IPAWS system.[241] The primary users of the CAP v1.2 USA IPAWS Profile v1.0 standard are thus CAP-based alert message originators, as opposed to EAS Participants, all of which are FCC licensees and regulated entities. As explained above, we have tentatively concluded that we should maintain a SAME-only output for the EAS and by extension not require EAS equipment to encode messages in anything other than the SAME format. Under this tentative approach, the Part 11 rules would not cover CAP message originating equipment. Further, we observe that FEMA's ICAP program is designed to establish conformance with the CAP v1.2 USA IPAWS Profile v1.0 standard. Accordingly, we tentatively conclude that it would be inappropriate to incorporate conformance with the CAP v1.2 USA IPAWS Profile v1.0 into the Commission's certification process. We seek comment on this tentative conclusion.

95. With respect to the ECIG Implementation Guide, we ask whether it would be appropriate for the Commission to certify conformance with this document. We observe, for example, that the Commission has historically certified the output side of the EAS system – specifically, that EAS equipment is outputting SAME-formatted EAS messages in conformance with EAS Protocol and other specifications in Part 11 (whether decoding and broadcasting a SAME-formatted message or encoding to originate or rebroadcast a SAME-formatted message). By contrast, certifying compliance with the ECIG Implementation Guide covers the input side – specifically, that incoming CAP-formatted EAS messages are being converted into SAME-compliant messages for broadcast (and, to the extent technically

[236] Monroe Comments at 1. *See also*, Timm Comments at 8.

[237] *See* Timm Comments at 8; Monroe Reply Comments at 1-2.

[238] Sage Comments at 4.

[239] *Id*. *See also*, Timm Reply Comments at 4.

[240] Sage Comments at 4.

[241] Although the CAP v1.2 USA IPAWS Profile v1.0 is designed to allow the IPAWS system to process alert messages formatted pursuant to OASIS CAP Standard v1.2, an alert message that has been formatted pursuant to OASIS CAP Standard v1.2 and CAP v1.2 USA IPAWS Profile v1.0 is not limited to being processed by the IPAWS system. For example, such a formatted alert message could be sent directly to EAS equipment via an RSS feed without having to be routed through the IPAWS system.

feasible,[242] rebroadcast, in the case of stations responsible for encoding EAS messages received for other stations to monitor) in conformance with the ECIG Implementation Guide.

96. TFT proposed that the Commission "provide test messages to both the testing laboratory and to manufacturers that may submit equipment for CAP certification."[243] We observe, however, that the Commission is not involved in the CAP standards development process or the development of the ECIG Implementation Guide. We also observe that while the ECIG Implementation Guide sets forth procedures for translating a message formatted pursuant to CAP v1.2 USA IPAWS Profile v1.0 into SAME, it does not provide test procedures for confirming compliance with such procedures. Further, the ECIG Implementation Guide itself was produced informally by a group of EAS equipment manufacturers and other interested parties and thus may not qualify as a formally recognized industry standard produced by an accredited standards-making body. Given this background, the Commission may not be well-suited to the task of creating test procedures to demonstrate ECIG Implementation Guide conformance.

97. We seek comment on whether and how we should implement conformance testing for the ECIG Implementation Guide. Should we adopt conformance testing for the ECIG Implementation Guide? Should we request that ECIG or FEMA develop a test plan and/or test messages to demonstrate CAP-to-SAME conversion in conformance with the ECIG Implementation Guide (that presumably could be incorporated into the existing ECIG Implementation Guide as an amendment or addendum)? Assuming that test procedures could be incorporated into the ECIG Implementation Guide as an amendment or addendum, would FEMA's adoption of the ECIG Implementation Guide with amendments or an addendum be sufficient or necessary to make compliance with the test procedures mandatory? How soon prior to the compliance date for meeting the CAP-related obligations in Part 11 (whether that date is September 30, 2011, or extended further, as a result of this item)[244] would such test procedures need to be finalized (and, if applicable, adopted by FEMA) so that manufacturers have sufficient time to complete device certification? Should we leave it to manufacturers to develop their own conformance test regime, perhaps based upon test procedures developed informally by ECIG but not necessarily incorporated into an amended version of the ECIG Implementation Guide, in concert with third party test laboratories or TCBs? Is it necessary or useful for the Commission to directly regulate the conformance testing procedures associated with the ECIG Implementation Guide?

98. If conformance testing is desirable, and assuming that uniform test procedures can be established, what entity or entities should perform such tests? If FEMA elects to add compliance testing for the ECIG Implementation Guide to its ICAP program, should we, as proposed by SAGE, mandate ICAP certification to cover the EAS equipment's CAP-to-SAME translation requirements, presumably as a prerequisite to obtaining FCC certification? Would the FCC's lack of control over the ICAP certification process, and uncertainty as to how long the ICAP program will remain in effect, make it imprudent to tie FCC certification to ICAP certification? For example, if FEMA were to adopt an updated CAP standard (as determined by OASIS) or revise its ICAP certification process, such that manufacturers were required to recertify previously certified equipment, would the manufacturer also have to obtain a new FCC certification?[245]

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[242] *See supra* note 97.

[243] TFT Reply Comments at 4. According to TFT, "[i]f a library of test CAP messages is available both to the testing laboratory and the manufacturer, then compliance should be a much easier task for both." *Id*.

[244] *See Waiver Order* at paras. 1 and 11.

[245] *See* Sage Comments at 12 (proposing that "[i]f FEMA updates the technical standards, requiring changes to its conformance test, the manufacturer must retake the conformity test, and resubmit the resulting new SDoC as an update to its certification documentation").

99. If we were to make ICAP certification a prerequisite to obtaining FCC certification for a CAP-decoding EAS device, how would manufacturers demonstrate ICAP certification compliance? Should we, as Sage suggests, require the inclusion of an ICAP SDoC along with the other FCC certification application materials? Alternatively, should we require inclusion of the final test report produced by the ICAP test laboratory along with the other FCC certification application materials, so that the Commission could maintain some level of oversight of the CAP-related testing process?

100. If FEMA elects not to add conformance testing for the ECIG Implementation Guide to its ICAP program, and assuming that FEMA or ECIG (or some other appropriate body) can develop suitable test procedures, should we allow TCBs to perform testing pursuant to such test procedures, just as the TCBs currently test for Part 11 compliance? Alternatively, should we make such conformance testing a requirement for FCC certification and permit third party test laboratories to perform such testing and then submit the test reports to a TCB for review? Whether formal test procedures are developed by FEMA or ECIG (or some other body) – either at all or in a timely manner that allows manufacturers to complete device certification prior to the deadline for compliance with the CAP-related obligations in Part 11 – should the Commission permit manufacturers to demonstrate compliance with the ECIG Implementation Guide via the Declaration of Conformity provisions in Part 2 of the Commission's rules?[246] Should we consider alternative approaches to ECIG Implementation Guide testing that would minimize costs or burdens to equipment manufacturers and/or EAS Participants yet would achieve the same goal of ensuring that EAS devices can convert CAP-formatted messages into EAS Protocol-compliant messages in conformance with the ECIG Implementation Guide requirements?

101. What, if any, effect would a requirement that EAS Participants monitor RSS feeds associated with IPAWS and state CAP systems have on any of the foregoing considerations related to device testing and certification? For example, should there be conformity assessment requirements for RSS functionality, and if so, how would the testing be carried out and by whom?

102. Finally, regardless of whether we make compliance with the ECIG Implementation Guide a component of FCC certification, we seek comment generally as to whether the current FCC certification process is sufficient or whether there are any revisions specific to EAS equipment that would make that process more effective and efficient.

103. We seek comment on whether our proposed approaches to EAS equipment certification are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to EAS equipment certification be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

104. *Intermediary Devices*. As discussed above, we are seeking comment on whether EAS Participants should be permitted to use intermediary devices to meet their CAP-related obligations where feasible. Sage proposed that "[a]ny portion of a multi-device Part 11 solution that receives CAP messages and converts them to EAS for use by an old Part 11 device must also [complete FEMA's conformity assessment program]."[247] While we take no position here as to whether intermediary devices should be subject to any ICAP conformity assessment adopted by FEMA, we observe that such

[246] *See* 47 C.F.R. §§ 2.1071-2.1077.

[247] Sage Comments at 11. *See also* TFT Reply Comments at 3 ("Even though a unit that only receives CAP messages and does not decode or encode EAS protocol messages might be utilized by an EAS Participant, TFT agrees with Sage that such devices must be tested for compliance with CAP.").

intermediary devices would appear to function as a CAP decoder combined with a SAME encoder. We seek comment on whether we should classify such devices as stand-alone devices as opposed to modifications to existing equipment, such as software or firmware upgrades,[248] which would make them subject to the same certification requirements that apply to stand-alone decoders and encoders (*i.e.*, equipment that carries out all the functions required for an EAS Participant to meet its EAS obligations, including compliance with any applicable portions of the Part 11 (and Part 15) rules (including compliance with ECIG Implementation Guide, if required)). Is it necessary or useful for the Commission to regulate intermediary devices directly and subject such devices to certification? What are the potential costs and benefits of this approach? How could any requirements we might consider to ensure that intermediary devices are capable of carrying out the functions for which they are designed and which are required for an EAS Participant to meet its EAS obligations be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

105. *Modified Equipment*. Section 2.1043 of the Commission's rules delineates the types of modifications (or permissive changes) that manufacturers can make to previously certified equipment that do not require equipment recertification.[249] In general, under these rules, manufacturers can permissively make changes that do not degrade radiofrequency characteristics and performance.[250] As with all certified devices, these rules apply to EAS equipment generally. In addition, section 11.34(f) specifies that modifications to existing authorized EAS equipment that are necessary to implement revisions to the EAS codes (set forth in section 11.31) or to implement the selective displaying and logging feature for state and local events are Class I permissive changes.[251]

106. With respect to modifications to certified equipment, Sage observed, "As the CAP system evolves, the portion of the EAS encoder/decoder that interfaces with the CAP system will require updates."[252] Sage pointed out that "[r]equiring manufacturers to recertify at each update will place an unnecessary load on the certification system, or will limit the ability of EAS Participants to use new CAP servers or transport mechanisms."[253] TFT stated,that "there is no need for re-certification of CAP equipment for transparent CAP standard changes but that there is a need for recertification when the version of the CAP standard changes, that, in the opinion of the Commission, affects translation of CAP messages into EAS Protocol."[254] According to TFT, "Re-certification for this type of circumstance could be achieved either by re-submission to a testing laboratory or by certification of the manufacturer that the

[248] *See* 47 C.F.R. § 2.1043.

[249] *See id*.

[250] *See*, *e.g.*, 47 C.F.R. § 2.1043(b)(1); *see also id*. at § 2.1043(a) (specifying that changes to the software installed in a transmitter that do not affect the radio frequency emissions do not require a filing with the Commission).

[251] *See* 47 C.F.R. § 11.34(f). This provision was added to Part 11 in the *2002 Report and Order* to make clear that certain new EAS codes and selective display and logging capabilities adopted therein could be implemented as modifications to existing equipment as Class 1 permissive changes. *See* Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System, *Report and Order*, 17 FCC Rcd 4055, 4074, para. 46 (2002) (*2002 Report and Order*). All new EAS equipment models manufactured after August 1, 2003, were required to be capable of transmitting and receiving such codes and selectively displaying and logging messages with state and local event codes. *See id*. at para. 47.

[252] Sage Comments at 7.

[253] *Id*.

[254] TFT Reply Comments at 5.

CAP reception device has been modified or upgraded to comply with a newer version of the CAP standard."[255]

107. We seek comment on the certification requirements that should apply to modified EAS equipment. Specifically, are the existing rules governing modifications to certified EAS equipment sufficient to permit periodic updates to EAS equipment without over-burdening manufacturers or the certification process, or would some embellishment of these rules be desirable for EAS equipment? Is there any point at which changes to the general CAP standard or CAP v1.2 USA IPAWS Profile v1.0 would necessitate recertification of previously certified CAP-enabled equipment? For example, if we were to adopt OASIS updates to the CAP standard that necessitated corresponding changes to the ECIG Implementation Guide, should we require recertification for previously certified CAP-enabled equipment to ensure that the equipment is still able to convert CAP-formatted messages into messages that comply with the EAS Protocol and other requirements set forth in Part 11? With respect to any EAS equipment that is capable of receiving CAP-formatted messages and translating such messages into SAME-compliant messages, and which may already have received FCC certification prior to the effective date of any new certification requirements we may adopt in this proceeding, should such equipment be subject recertification under the new certification rules?[256] In addition, if we were to require device certification via FEMA's ICAP program as a prerequisite to FCC certification, and FEMA were to revise the CAP standards, or the testing process, such that manufacturers would have to recertify equipment previously certified under the ICAP program, should the manufacturer also have to obtain a new FCC certification?

108. We seek comment on whether our proposed approaches to modifications to certified equipment are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to recertification requirements be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

D. 180-Day CAP Reception Deadline

109. In the *Second Report and Order*, the Commission established a deadline for compliance with CAP-related obligations of 180-days from the date FEMA adopted CAP.[257] As indicated above, on September 30, 2010, FEMA published the technical standards and requirements for CAP-formatted EAS alerts, triggering the CAP reception requirement's 180-day clock and establishing March 29, 2011, as the initial deadline for compliance with CAP-related obligations.[258] Also as indicated above, on November 18, 2010, we adopted the *Waiver Order*, which extended the 180-day deadline until September 30, 2011.[259] We also explained in the *Waiver Order* that we would seek comment on whether such extension

[255] *Id*.

[256] Sage proposes that "CAP-capable EAS devices that have previously received Part 11 certification and are already in the field can have their certification updated to the new rules by adding the [FEMA ICAP] SDoC to their existing certification now on file with the FCC." Sage Comments at 11.

[257] *See Second Report and Order*, 22 FCC Rcd 13275, 13288, para. 26. *See also* 47 C.F.R. § 11.56.

[258] *See* "FEMA Announces Adoption Of New Standard For Emergency Alerts," *available at* http://www.fema.gov/news/newsrelease.fema?id=52880.

[259] *See Waiver Order* at para. 1.

is sufficient and reserved the right to further extend the CAP-compliance deadline in whatever rule revisions we may adopt in this proceeding.[260]

110. We now seek comment on whether the September 30, 2011, deadline for CAP-compliance set forth in the *Waiver Order* is sufficient or whether we should extend or modify it to be triggered by some action other than FEMA's adoption of CAP. As a threshold matter, we seek comment on what action or event, if any, should trigger the time period for compliance with the obligation to process CAP-formatted messages. For example, if we must implement new certification rules to ensure that all EAS devices process CAP-formatted messages in a consistent and standardized manner, should the time period for compliance be triggered by the effective date of any new certification requirements that we may adopt in this proceeding?[261] Are there other external requirements that could affect manufacturers' ability to certify equipment that could impact the trigger date, such as completion of procedures for testing conformance with the ECIG Implementation Guide (assuming that is mandated)?

111. Assuming that a certification regime suitable to permit marketing and deployment of CAP-compliant EAS equipment is in place (whether under the current rules or amended rules adopted in this proceeding), how much time would manufacturers reasonably require to design, certify, and market CAP-compliant EAS equipment? Similarly, how much time do EAS Participants require to acquire, deploy, and test such equipment and to train personnel to use the equipment? For example, assuming that a time period of 180 days from the effective date of a suitable certification regime for CAP-enabled EAS equipment were sufficient for manufacturers to certify and begin to market CAP-compliant EAS equipment, would an additional 90 days be sufficient for EAS Participants to acquire, deploy, and test such equipment and to train personnel to use such equipment? Under this example, the CAP-compliance deadline would be 270 days from the effective date of revised rules governing EAS device certification. Should we consider alternative timeframes? If so, what are they and why are they justified? Are there other factors, such as the time required for EAS Participants located in rural or underserved areas to obtain IP connectivity, that we should take into consideration in establishing a new deadline, or should these situations be addressed on a case-by-case basis through the waiver process? What are the potential costs and benefits of extending the deadline for CAP-compliance? How could any requirements we might consider with respect to extending the deadline for CAP compliance be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

E. CAP Messages Originated by State Governors

112. In the *Second Report and Order*, the Commission mandated that all EAS Participants within a state (other than SDARS and DBS providers) be able to receive and transmit state-level and geographically targeted CAP-formatted EAS messages, as aggregated and delivered by the state governor or his/her designee or by FEMA on behalf of such state governor, within 180 days from the date FEMA adopts CAP, provided that the methodology for such delivery is explicitly described in the State Area EAS Plan that is submitted to and approved by the Commission.[262] This obligation is codified in sections 11.21(a) and 11.55(a) of Part 11.[263]

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[260] *See id*. at para. 11.

[261] *See*, *e.g.*, Monroe Comments at 2 (suggesting that the "timeline to adopt CAP should begin after the FCC enables a certification program for CAP-EAS devices.").

[262] *Second Report and Order*, 22 FCC Rcd 13275, 13300-01, paras. 55-56. *See also* 47 C.F.R. § 11.55.

[263] 47 C.F.R. §§ 11.21(a), 11.55(a). A couple of parties urged us to revise the current wording of the obligation to process CAP-formatted messages initiated by state governors in section 11.55 to "reflect that the must-carry (continued….)

113. Several parties sought clarification of this mandate. CSRIC, for example, stated with respect to section 11.55 that "[t]he mandatory Gubernatorial Must-Carry message requires additional definition."[264] As detailed below, CSRIC and parties responding to the *Part 11 Public Notice* sought more specific clarification with respect to how EAS Participants will compile and process state CAP messages, how state CAP messages will be implemented within the EAS Protocol coding scheme, what constitutes a "geographically targeted area EAS message," who can serve as the governor's "designee," and other related issues.

114. *Basic Obligation to Receive and Transmit Gubernatorial CAP Messages*. A few parties suggested that the basic obligation to receive and transmit gubernatorial CAP messages requires clarification with respect to how those messages will be formatted. Monroe, for example, suggested that "the Commission needs to clarify how mandatory Governor's message[s] are to be compiled and processed."[265] SpectraRep stated that "[a]dditional guidance or suggestions are needed from the FCC … to ensure interoperability among [state] CAP system/server providers and EAS CAP equipment providers."[266]

115. As a threshold matter, while our rules accommodate state CAP systems by requiring EAS Participants to process gubernatorial CAP-formatted EAS messages, some measure of uniformity appears warranted to ensure that EAS equipment does not need to be designed to accommodate multiple variations of state CAP systems that might be deployed now or in the future. More specifically, while FEMA has adopted one set of CAP standards to implement federal CAP processing via its IPAWS system, it seems entirely possible that a given state could adopt a different set of CAP standards for its state CAP alerting system. For example, a state might deploy a CAP-based system that does not interface with IPAWS at all. It has never been the Commission's intent that EAS Participants be required to deploy multiple variations of EAS equipment to meet their basic CAP-related obligations.[267] Instead, the Commission's efforts have been directed primarily towards implementing rules that will enable and obligate the processing of federal CAP-formatted alert messages over the existing EAS. Against this backdrop, the Commission sought to provide an incentive for state governors to similarly obtain mandatory processing of their CAP-formatted messages when (and only when) they deploy systems that are fully compatible with federal CAP systems.

116. Accordingly, we tentatively conclude that the obligation to receive and transmit CAP-formatted messages initiated by state governors applies only to the extent that such CAP messages have been formatted using the CAP standard adopted by FEMA for federal CAP messages – specifically,

(Continued from previous page)
governor messages must be CAP-formatted." Timm Comments at 3. *See also* NAB Reply Comments at 8. In section III.B(5) of this item, we propose to correct this minor oversight in the revised rules we are adopting in this proceeding. *See supra* para. 73.

[264] *CSRIC Final Report*, § 5.1. *See also* SpectraRep Comments at 4 ("We ask the Commission for additional clarification as to how the new Governors Must Carry parameter in CAP messages can be implemented in practice by an advanced CAP EAS system."); National Cable & Telecommunications Association Comments, EB Docket 04-296 (filed May 17, 2010) at 4 (NCTA Comments); TFT Reply Comments at 6; Monroe Reply Comments at 1.

[265] Monroe Reply Comments at 1.

[266] SpectraRep Comments at 4.

[267] CSRIC, for example, observed that "IP based systems are . . . in . . . 18 states (plus the District of Columbia), of which at least 10 are already originating and disseminating CAP messages for EAS, and the remainder appear to have near-term plans to begin introducing CAP message origination and dissemination within their state systems." *CSRIC Final Report*, § 4.1.2. CSRIC further stated that "[w]here advanced EAS capabilities have not yet been deployed, emergency managers continue to utilize EAS in traditional manners." *Id*.

OASIS CAP Standard v1.2 and CAP v1.2 USA IPAWS Profile v1.0.[268] EAS Participants, working with state alerting authorities, may of course voluntarily deploy a state CAP message receiving capability that differs from the basic requirement to receive CAP messages formatted pursuant to the standards adopted by FEMA. We seek comment on this tentative conclusion.

117. The obligation to receive and transmit CAP messages initiated by a state governor also necessarily requires that CAP messages be translated into SAME, as we have tentatively concluded that EAS Participants will only be required to broadcast SAME-compliant messages. For the same reasons articulated above, we tentatively conclude that the obligation to receive and transmit only CAP-formatted messages initiated by state governors necessitates that such CAP messages will be translated into SAME-compliant messages consistent with the CAP-to-SAME translation standard adopted for federal CAP messages – specifically, the ECIG Implementation Guide. EAS Participants, working with state alerting authorities, may voluntarily implement a capability to translate CAP messages in a manner that differs from this basic requirement. However, a state must fully describe any state CAP system in a State Area EAS Plan submitted to the Commission for approval.[269] We seek comment on this tentative conclusion. Is it necessary or useful for the Commission to specify CAP-to-SAME requirements for gubernatorial CAP messages?

118. We seek comment on whether our proposed approaches to the obligation to receive and transmit gubernatorial CAP messages are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to the obligation to receive and transmit gubernatorial CAP messages be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

119. *Gubernatorial CAP Message Originator and Event Codes*. Section 11.31 sets forth the EAS Protocol requirements.[270] Among other things, this section specifies certain codes that identify the originator of the EAS alert and the type of event involved (*e.g.*, the event code for a severe thunderstorm warning is "SVR").[271] CSRIC and several parties responding to the *Part 11 Public Notice* observed that alert originators may need separate EAS originator and event codes to implement the obligation to process mandatory gubernatorial CAP-formatted alerts. CSRIC recommended that the Commission "[c]larify how [the] Governor Must Carry messages are to be implemented in [the] EAS Protocol" and suggested, for example, that we "create [a] GOV originator code."[272] CSRIC also suggested that "a separate EAS event code may be needed for this function."[273] TFT stated that "the Commission needs to clarify how 'Governor's Must Carry' messages are to be processed because there is no Event or

[268] As noted above, alert messages formatted pursuant to OASIS CAP Standard v1.2 and CAP v1.2 USA IPAWS Profile v1.0 could be distributed by a state CAP system directly to EAS equipment via an RSS feed without having to be routed through the IPAWS system. Accordingly, limiting EAS Participants' obligation to process governor-originated CAP messages to those messages that have been formatted pursuant to OASIS CAP Standard v1.2 and CAP v1.2 USA IPAWS Profile v1.0 would not have the effect of requiring state CAP systems to interface with IPAWS. *See supra* note 241.

[269] *See* 47 C.F.R. § 11.21.

[270] *See* 47 C.F.R. § 11.31.

[271] *See id*. § 11.31(d), (e).

[272] *CSRIC Final Report*, § 5.1.

[273] *Id*.

Originator code to correspond to this requirement."[274] The National Cable & Telecommunications Association (NCTA) asserted that "to carry the CAP data through for dissemination to the public, the EAS protocol would need to be changed to add the governor origination code, and software would need to be installed to ensure that it is always passed through the [cable] system."[275]

120. We seek comment as to whether we must adopt a new origination and/or event code to fully implement the obligation of EAS Participants to process CAP-formatted messages initiated by state governors and, if so, what those codes should be. We also seek comment on how adoption of new originator and/or event codes might impact the existing base of deployed EAS equipment. In this regard, for example, Monroe asserted that "[l]egacy EAS decoders likely cannot be forced to automatically air an alert," adding that "[t]his can present a compliance problem for older EAS decoders that are not directly integrated with a CAP receiver."[276] Could new originator and/or event codes be implemented in legacy EAS equipment via software or firmware modifications? Alternatively, could intermediary devices process gubernatorial CAP messages in a manner that would ensure full compliance with the gubernatorial CAP message carriage requirements without impeding legacy EAS equipment from meeting other origination and event codes requirements, such as the decoder display and logging requirements in section 11.33(d)?[277] Would some of the existing base of deployed legacy EAS equipment have to be replaced if we were to adopt new originator and/or event codes? If so, what percentage?

121. Would adoption of new originator and/or event codes to facilitate the obligation to process CAP-formatted messages initiated by state governors have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted gubernatorial messages? Would adoption of an event code corresponding to gubernatorial CAP-formatted messages overly constrain the utility of other data that can be relayed using the EAS Protocol? For example, because only one event code can be used in an EAS message, if we were to require an event code for gubernatorial CAP-formatted messages, other important information describing the nature of the alert, such as a tornado warning (represented by the event code "TOR"), could not be conveyed. Alternatively, would it be possible to implement the obligation to process CAP-formatted messages initiated by state governors without having to implement new originator or event codes by using the originator code for civil authorities ("CIV")? What are the potential costs and benefits of adopting new originator and/or event codes for CAP-formatted messages originated by state governors? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what specific performance objectives should we specify to facilitate monitoring the success of any potential cause of action?

122. *Geographic Application and Targeting of Gubernatorial CAP Messages*. Section 11.55(a) specifies that the obligation to carry gubernatorial CAP-formatted messages applies to "[a]ll EAS Participants *within a state* [except for SDARs and DBS providers]."[278] Section 11.21(a), however,

[274] TFT Reply Comments at 6.

[275] NCTA Comments at 4-5.

[276] Monroe Comments at 6.

[277] *See* 47 C.F.R. § 11.33(d) (requiring display of, among other things, the originator and event codes). *See also*, *e.g.*, 47 C.F.R. § 11.51(d), (g)(3), (h)(3), (j)(2).

[278] 47 C.F.R. § 11.55(a) (*italics added*). In adopting this requirement, the Commission concluded that "requiring EAS Participants to receive CAP-formatted EAS messages delivered by a state governor of any state *in which they provide service* falls within the scope of our Title I subject matter jurisdiction as well as our public interest authority to grant licenses for radio communication under Title III of the Act." *Second Report and Order*, 22 FCC Rcd 13275, 13300-01, para. 56 (*italics added*).

requires the State Area EAS Plan to specify how state-level and geographically-targeted EAS messages initiated by a state governor or his/her designee will be transmitted to "all EAS Participants who *provide services in the state*."[279]

123. Timm questioned how the obligation to process CAP-formatted messages initiated by state governors applies to EAS Participants that provide service that overlaps state borders and whether localized geo-targeting of EAS messages is feasible. With respect to cross-border service providers, Timm observed, "For stations located on or near state borders, the rule [requiring EAS Participants to process CAP-formatted messages initiated by state governors] does not define if these stations must carry alerts from governors of all nearby states, or merely the governor of the state in which the station is located."[280] To the extent that EAS Participants are expected to carry CAP-formatted EAS messages delivered by the state governor (or its designee) of any state in which an EAS Participant provides service, Timm asserted that "the term 'provides service' must be defined."[281] Timm further stated, "Presumably this definition would be tied to some level of the station's FCC-defined coverage area."[282] With respect to localized geo-targeting of the gubernatorial message, Timm asked, "Who or what defines the must-carry geographically targeted area for each broadcast station?"[283] According to Timm, "This appears to involve defining the geographically targeted area as some level of the station's FCC-defined coverage area."[284]

124. We seek comment on whether we should revise the current obligation to process CAP-formatted messages delivered by the governor of the state in which the EAS Participant is located to include governors of any adjacent states in which the EAS Participant provides service. Are instances of cross-border service provision sufficient in number and scale to warrant revisions to section 11.55 to address them? Presumably, this issue already exists with respect to SAME-based state alerting. How are cross-border situations currently being addressed with respect to SAME, and would those approaches make sense for state CAP-formatted messages? What would happen if we were to apply the obligation to process CAP-formatted messages initiated by state governors based upon the location of the EAS Participant's signal contour or service area and such signal contour or service area overlapped one state that utilized a CAP system and another that did not? Is there a need for the Commission to address this issue in the Part 11 rules? Should this issue instead be resolved by the affected states, with the result reflected in the respective State Area EAS Plans?

125. When adopting the geo-targeting requirement, the Commission explained in the *Second Report and Order* that it sought to provide governors with the ability deliver a geographically-targeted alert to "particular regions" as opposed to just state-wide distribution.[285] The Commission recognized, however, that "terrestrial broadcasters may not presently have the technical ability to restrict delivery of a targeted alert solely to the affected portion of their service area."[286] Accordingly, the Commission

[279] 47 C.F.R. § 11.21(a) (*italics added*).

[280] Timm Comments at 1-2.

[281] *Id*. at 2.

[282] *Id*.

[283] *Id*.

[284] *Id*.

[285] *See Second Report and Order*, 22 FCC Rcd 13275, 13304, para. 64.

[286] *See id*.

observed that EAS Participants could comply with this requirement "by utilizing geographic-specific alerts such as subscripts utilizing localized information."[287]

126. As discussed above, CAP is a versatile data protocol that has the potential to provide a great deal more capacity for geo-targeting message content than a SAME-based alert message.[288] However, we have tentatively concluded that, for the time being, CAP messages must be converted into SAME-compliant messages. Accordingly, the geo-targeting capabilities for state CAP-formatted messages will by definition be no different than they are for SAME-formatted messages, which the states have used for many years. Specifically, under this approach, state CAP messages must correspond to the geographic codes set forth in section 11.31(f), which limit the geographic scope of an EAS alert to states and counties.[289] We also observe, however, that because the geographic codes set forth in section 11.31(f) are limited to states and counties, they may lack the flexibility to precisely define the geographic parameters of every alert. Accordingly, for state SAME-based EAS messages, EAS Participants often make determinations as to whether they will broadcast a given state EAS message based upon the event code, location code, and if applicable, the audio message.[290] While we require EAS Participants to acquire and transmit gubernatorial CAP-formatted messages generally, we expect that this same process will apply to CAP-formatted messages initiated by state governors. Accordingly, we tentatively conclude that the geo-targeting requirement associated with mandatory state governor alerts shall be defined, at least for the time being, by the location provisions in the EAS Protocol. We seek comment on this tentative conclusion.

127. We seek comment on whether our proposed approaches to geo-targeting are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to geo-targeting be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

128. *Governor's "Designee."* The obligation to process CAP-formatted messages initiated by state governors also applies to CAP-formatted messages initiated by state governors' "designees."[291] Several parties responding to the *Part 11 Public Notice* raised concerns regarding which authorities the governor could designate to serve in that capacity. In particular, broadcast interests raised concerns that the "designee" language could become a mechanism for local activation of the obligation to process CAP-formatted messages initiated by state governors. The Named State Broadcasters Associations, for example, urged that the obligation to process CAP-formatted messages initiated by state governors "should not be expanded to other governmental authorities below the level of Governor."[292] NAB indicated "concerns with the delegation of mandatory EAS activation below the gubernatorial level" and

[287] *See id.*

[288] In a system capable of transmitting all the information contained in (or linked via) a CAP message pursuant to the CAP message's instructions, alerts theoretically could be very narrowly targeted to discreet geographic areas, restricted only by the transmission technology.

[289] *See* 47 C.F.R. § 11.31(f).

[290] EAS Participants operating in automated mode can program their EAS equipment to automatically pass through state EAS messages based upon, for example, event codes, geographic area, and time duration.

[291] *See* 47 C.F.R. § 11.55.

[292] Named State Broadcasters Associations Reply Comments, EB Docket 04-296 (filed June 14, 2010) at 6-7 (NSBA Reply Comments).

encouraged the Commission "to limit the officials who may qualify as a governor's designee."[293] According to NAB, "expanding the universe of officials who may issue EAS alerts may lead to unwarranted alerts, confusion among officials over who is supposed to trigger an alert for a particular event, and public desensitization to emergency alerts."[294]

129. In the *Second Report and Order*, the Commission recognized that "requiring EAS Participants to receive emergency alerts directly from state political subdivisions, such as counties and cities, could be unduly complex and costly and would create the potential for some alerts to reach those who may not be affected by a particular emergency."[295] In recognition of these complexities, the Commission indicated that it would "only require EAS Participants to receive CAP-formatted EAS messages delivered to them by a state governor (or the governor's designee), or by FEMA (or its designee) on behalf of a state."[296] The Commission thus at least strongly implied that state political subdivisions, such as counties and cities, could not serve as designees for purposes of initiating the obligation to process CAP-formatted messages initiated by state governors. At the same time, the Commission sought comment as to whether local, county, tribal, or other state governmental entities should be allowed to initiate mandatory state and local alerts and how the Commission should decide which public officials should be permitted to activate such alerts.[297] Pending a final resolution of this issue, local, county, tribal, or other state governmental entities will continue to be ineligible to serve as designees for purposes of initiating CAP-formatted messages on behalf of state governors. In the meantime, we take this opportunity to invite additional comment on this issue. What are the potential costs and benefits of requiring EAS Participants to receive emergency alerts directly from state political subdivisions? How could any requirements we might consider with respect to requiring EAS Participants to receive emergency alerts directly from state political subdivisions be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

130. *Non-Participating National (NN) Sources*. The Part 11 rules permit EAS Participants to request FCC authorization not to participate fully in the national level EAS activation.[298] Essentially, these non-participating stations follow all of the EAN-related requirements except broadcasting the Presidential audio message.[299]

131. Timm asked for clarification as to whether the non-participating stations (defined in section 11.18(f)) are subject to the obligation to process CAP-formatted messages initiated by state governors. Specifically, Timm asked whether "the NN authorization exempt[s] a station from the governor's message as well" and "[i]f so, must they sign off for that alert as well[,] [o]r will a category of

[293] National Association of Broadcasters Comments, EB Docket 04-296 (filed May 17, 2010) at 10 (NAB Comments). *See also* NAB Reply Comments at 8; *see also* Texas Association of Broadcasters Comments, EB Docket 04-296 (filed May 17, 2010) at 3 ("Some specific restrictions need to be set, also, on who a governor can designate to exercise his or her authority to issue mandatorily carried alerts.") (TAB Comments).

[294] NAB Reply Comments at 8.

[295] *Second Report and Order*, 22 FCC Rcd 13275, 13300-01, para. 56.

[296] *Id*.

[297] *See Next Generation EAS FNPRM*, 22 FCC Rcd 13275, 13307-08, para. 74.

[298] *See* 47 C.F.R. §§ 11.18(f), 11.19, 11.41(b).

[299] *See* 47 C.F.R. §§ 11.18(f), 11.54(b)(2)(ii).

NS, Non-participating State, be created?"[300] Timm observed, "As an SECC Chair, I would hope that all stations would be required to carry the governor's message with no exceptions, but it seems somewhat incongruous to offer an exemption for National messages but require the broadcast of State messages."[301] Timm suggested that it might be time to "re-examine the policy of NN authorizations," further observing that "[w]ith the current automated equipment, it appears it would be easier to carry the National message than try to automate signing off, monitoring for the [Emergency Action Termination message], and returning to the air."[302] Elimination of NN authorizations would mean that all EAS Participants would be required to transmit the Presidential EAS message as well as gubernatorial CAP-formatted messages (assuming a state has met the State Area EAS Plan requirements).

132. We seek comment on whether the obligation to process CAP-formatted messages initiated by state governors should apply to NN stations. If NN stations were required to process CAP-formatted messages initiated by state governors, how should the rules reflect such a result? For example, NN stations are required to broadcast the EAS codes, Attention Signal, and sign-off announcement in the EAS Operating Handbook.[303] What provisions would be analogous as applied to gubernatorial CAP-formatted messages? Alternatively, should we adopt Timm's proposal to eliminate NN status altogether, in which case all EAS Participants would be required to transmit both the Presidential EAS messages and the CAP-formatted EAS messages initiated by state governors? In this regard, we observe that there are relatively few NN stations in existence, they are already required to deploy a decoder that complies with all EAS message processing requirements,[304] and they follow most of the EAN processing requirements.[305] What are the potential costs and benefits of eliminating NN stations or requiring them to process CAP-formatted messages transmitted by state governors? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

133. *Miscellaneous Rule Changes Related to Fully Implementing the Obligation to Process CAP-Formatted Messages Initiated by State Governors*. As discussed below, we seek comment or reach tentative conclusions on whether we should revise other sections of Part 11 to codify the obligation of EAS Participants to process CAP-formatted messages initiated by state governors. With respect to each section, we seek comment on whether our proposed revisions are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any revisions we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

134. *Section 11.33(a)(9)*. Section 11.39(a)(9) allows EAS Participants to set their decoders to automatically reset to the monitoring state if they do not receive an EOM code within a predetermined minimum time frame (not less than two minutes).[306] This section further provides that a decoder must

[300] Timm Comments at 4.

[301] *Id*.

[302] *Id*.

[303] *See* 47 C.F.R. §§ 11.18(f), 11.54(b)(2)(ii).

[304] *See* 47 C.F.R. § 11.11.

[305] *See* 47 C.F.R. § 11.18(f).

[306] *See* 47 C.F.R. § 11.33(a)(9).

disable this reset function if it receives an EAN event code (so that the President's message is not interrupted).[307] Although not raised by CSRIC or the parties responding to the *Part 11 Public Notice*, we seek comment as to whether we should revise this section to accommodate gubernatorial CAP-formatted messages. For example, if we were to adopt a new originator (or event) code for gubernatorial CAP-formatted messages, should EAS Participants be required to disable the reset function for CAP-formatted EAS messages that include such a governor origination code? Alternatively, should we allow automatic reset, with the existing two-minute minimum or some time frame greater than two minutes? Would any of these approaches require adoption of an origination code specific to the governor (such as GOV)? If not, how would an EAS device know that it is receiving a gubernatorial CAP-formatted message? How would an EAS device know that the Commission has approved a state's State Area EAS Plan, since that is a prerequisite to triggering the obligation to process CAP-formatted messages initiated by state governors? Is it necessary or useful for the Commission to address this issue?

135. *Section 11.44*. Section 11.44 sets forth an EAS message priority scheme under which EANs take priority over (and preempt) all other messages and EAS Participants transmit other EAS messages in the following order: (1) Local Area Messages; (2) State Messages; and (3) National Information Center (NIC) Messages.[308] CSRIC recommended that we modify the EAS Participants' priority scheme in section 11.44(b) to include a "reference to additional messages from Tribal, Territorial and [Gubernatorial] Must Carry."[309] As detailed more fully below (in section III.F of this item), the Commission originally established the priority scheme in section 11.44 under the Emergency Broadcasting System (EBS) rules to apply during a National Level emergency condition (*i.e.*, the time period between the receipt of an EAN and an Emergency Action Termination (EAT)) to facilitate manual processing of EAS messages.[310] Also as discussed below in section III.F of this item, we are seeking comment on whether this priority scheme is obsolete and we should delete it.[311] Further, the question of whether and how we might incorporate tribal and territorial messages into the rules codifying the obligation to process CAP-formatted messages initiated by state governors is not within the scope of this item.[312]

136. We seek comment on whether there is any practical need to provide gubernatorial CAP-formatted messages with priority over local EAS messages and whether such a scheme is technically feasible.[313] Since most local EAS messages likely would be carried over the same network as state EAS messages, would EAS equipment airing a local area EAS message be able to differentiate between an EAS message that was originated and broadcast in the SAME format and a gubernatorial CAP-formatted

[307] *See id*.

[308] *See* 47 C.F.R. § 11.44(a), (b).

[309] *CSRIC Final Report*, § 5.1.

[310] *See infra* para. 162.

[311] *See infra* para. 163.

[312] As noted above, the issue of whether local, county, tribal, or other state governmental entities should be allowed to initiate mandatory CAP-formatted state and local alerts will be addressed in the item responding to the *Next Generation EAS FNPRM*. *See supra* note 167.

[313] For example, Trilithic asked, with respect to the existing priority requirements in section 11.44: "What protocol mechanism is used for the EAS Encoder/Decoder to know what messages are Local Area or State?"; whether the ordering requirements "impl[y] that an EAS Encoder/Decoder can store multiple EAS messages and send them out in a different order than they were received"; and whether "Local Area Messages [should] preempt (terminate and replace) incoming or outgoing State Messages?" Trilithic Comments at 4.

message that was originated in CAP but was converted into and rebroadcast in SAME format? What would happen to a local area EAS message when EAS equipment detects a gubernatorial CAP-formatted EAS message – would the arrival of the latter terminate processing of the former? Since most local EAS messages likely would be carried over the same network as state EAS messages, would this issue best be left to the states to manage within their EAS systems?

137. *Section 11.51(m)*. Section 11.51(m) sets forth certain minimum EAS transmission requirements.[314] Among other things, this section requires EAS Participants to transmit all EAS messages in which the header code contains the EAN, EAT, and RMT event codes and when the accompanying location codes include their state or state/county.[315] CSRIC recommended that we "[a]dd Gubernatorial Must-Carry CAP status" to section 11.51(m).[316] Because the obligation to process CAP-formatted messages initiated by state governors is a minimum obligation that applies to all EAS Participants (except SDARs and DBS providers), it seems appropriate to incorporate it in section 11.51(m). Further, if we were to adopt a new origination code for gubernatorial CAP-formatted messages, we could simply include that event code in this section.

138. We seek comment on how we could amend section 11.51(m) to incorporate the obligation to process CAP-formatted messages initiated by state governors. We observe that this obligation does not apply unless and until a state specifies the methodology for delivering the gubernatorial CAP-formatted messages in the State Area EAS Plan that it submits to and is approved by the Commission.[317] Accordingly, even if we were to adopt a new origination code for gubernatorial CAP-formatted messages, how would an EAS Participant's EAS equipment know that the Commission had approved a state's State Area EAS Plan? Since an EAS Participant likely would only be receiving governor-originated CAP-formatted messages pursuant to a State Area EAS Plan, is there any practical need for EAS equipment to confirm that such a plan has been submitted to and approved by the Commission? Is it necessary or useful for the Commission to incorporate the gubernatorial CAP obligation in section 11.51(m)?

F. Revising the Procedures for Processing EANs

139. The Part 11 rules specify that the EAT message is used to terminate an EAN. More specifically, as set out in section 11.13, the EAN is the notice to EAS Participants that the EAS has been activated for a national emergency, while the EAT is the notice to EAS Participants that the EAN has terminated.[318] This relationship is described in section 11.54, which specifies the actions an EAS Participant must take upon receiving an EAN.[319] Under these provisions, the EAN commences a "National Level emergency" condition, during which EAS Participants must discontinue regular programming, make certain announcements set forth in the EAS Operating Handbook, and broadcast a

[314] *See* 47 C.F.R. § 11.51(m).

[315] *See id*.

[316] *CSRIC Final Report*, § 5.1.

[317] *See* 47 C.F.R. §§ 11.21(a), 11.55.

[318] *See* 47 C.F.R. § 11.13.

[319] *See* 47 C.F.R. § 11.54.

"common emergency message," as prioritized under section 11.44.[320] EAS Participants are required to follow this process until receipt of the EAT.[321]

140. We received several comments and questions regarding the EAT, and there appears to be considerable confusion concerning the EAT's function. SpectraRep, for example, stated, "There should be greater specificity as to the usage of the EAT event code, including message duration as well as that an EAT is a separate message from an EAN."[322] TFT observed, with respect to the EAN and EAT descriptions in section 11.13, "This section is sometimes incorrectly interpreted by EAS Participants to imply that a condition that would result in an EAS or EAT EAS message may necessitate a special EAS message with an Event code of EAN or EAT."[323] Parties also pointed out various inconsistencies in the codification of the EAT. For example, TFT argued that the message priority provisions in sections 11.33(a)(11) and 11.44(a) will prevent an EAT from terminating an EAN and cause equipment lock-ups in cases where EAS Participants receive an EAN that does not include an EOM.[324]

141. Commenters also raised questions regarding the overall construct for processing EANs set forth in section 11.54. Trilithic, for example, observed, "Current EAS regulations appear to state that an EAN indicates the beginning of a national emergency, an EAT indicates that the national emergency has been resolved or is over, and in between the two, perhaps for several hours or days, emergency communications, including EAS, are available for local coordination."[325] TFT also stated that section 11.54(b) "suggests that an operator be present to monitor EAS sources, discontinue normal programming, and make announcements."[326] Timm asserted that EAS Participants cannot comply with the obligation in section 11.54(b)(1) to monitor the two EAS sources assigned in the State or Local Area EAS Plan or FCC Mapbook for any further instructions following receipt of an EAN because "[w]hen an EAS endec receives an EAN code, it immediately puts that EAS monitored source on the air and is delivering whatever audio is being furnished by the National government as part of that EAN message."[327] Timm also questioned how EAS Participants can make the various announcements specified in section 11.54 and the EAS Operating Handbook.[328]

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[320] *See id*. § 11.54(b)(3). The EAS Participants display standby script when not airing "common emergency messages." *See id*. § 11.54(b)(4).

[321] *See id*. § 11.54(b)(3).

[322] SpectraRep Comments at 4.

[323] TFT Comments at 2.

[324] *See* TFT Comments at 6-7.

[325] Trilithic Comments at 6. Trilithic also sought clarification regarding whether "emergency communications, including EAS, are available for local coordination" in between the EAN and EAT; whether, "once the audio pass-through of an EAN message is established, is this left open after the 'Presidential Message' is over so that State and Local announcements are also patched through to listeners"; the role of the EOM relative to the EAT and how the monitoring requirements in section 11.54(b)(1) function in between an EAN and EAT. *Id*.

[326] TFT Comments at 8. Timm echoed this sentiment, stating that "the FCC needs to revise its National EAS Activation procedure to account for the fact that all cable systems and vast numbers of broadcasters operate in automatic unattended mode." Timm Reply Comments at 7. *See also* Trilithic Comments at 6.

[327] Timm Comments at 5. Timm makes a similar observation with respect to the transmission and announcement requirements set forth in section 11.54(b)(2)(i). *See id*.

[328] For example, with respect to the requirement in section 11.54(b)(3) that EAS and Participating National sources "must transmit a common emergency message until receipt of the EAT message," Timm asks, "Does this just refer to carrying the audio within the EAN alert? Then where do the EAS Operating Handbook announcements come (continued….)

142. To remedy any confusion that may exist with respect to the EAT function and, more generally, how EANs are processed within the EAS, Timm suggested eliminating the EAT altogether and relying solely on the EOM code.[329] Timm proposed a simplified process, under which "[t]he federal government will send the EAN code, deliver all needed information, and the National EAS Activation will thus end with the EOM code which follows the EAN code."[330] According to Timm, "the EAT code no longer has a place in this scenario and should be eliminated."[331] Timm added, "Eliminating the EAT, and bringing the National EAS Activation into alignment with the way all other EAS alerts are handled (simply an Event Code followed by an EOM code), seems prudent and will clear up confusion."[332] Trilithic supported "elimination of [the] EAT, and the ending of the National Activation with the EOM code."[333]

143. We seek comment on whether the procedures set forth in section 11.54 for processing EATs and, more broadly, EANs, are problematic and technically impractical for automated operation. As indicated, section 11.54 describes a process whereby the EAN initiates a national emergency condition, during which EAS equipment must discontinue regular programming and air various announcements; air alternate emergency messages in accordance with the priority scheme in section 11.44; and in between, air standby script, all of which continues until receipt of the EAT.[334] The Commission derived this framework from the former EBS rules, under which EAS Participants processed all EAS alerts manually and EANs were distributed to broadcast and cable entities via a separate, dedicated network.[335] When the

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in?" Timm Comments at 5. With respect to the requirement in section 11.54(b)(4) that EAS Participants transmit standby script until emergency messages are available, Timm observes that "stations can only read a script if an EOM has been sent following the EAN to release their EAS endecs. However, the EAS Operating Handbook does not mention sending that EOM until the EAN event is over. In addition, if the EOM following an EAN is sent to release EAS endecs, it would seem more prudent to have broadcast stations filling with any local emergency information rather than requiring that a generic National Standby Script be read over and over." *Id*.

[329] *See* Timm reply Comments at 8.

[330] *Id*.

[331] *Id*.

[332] *Id*.

[333] Trilithic, Inc., Reply Comments, EB Docket 04-296 (filed June 14, 2010) at 2 (Trilithic Reply Comments) ("Allowing the EOM to end the National activation allows the Federal Government the ability to provide any information necessary, then relinquish control for local coordination using the tools that State and Local government are trained for and use daily. Any additional information from the Federal Government can be presented with another EAN.").

[334] *See* 47 C.F.R. § 11.54(b).

[335] As described in the *1994 Report and Order*, under the EBS system, EANs and EATs were distributed by two methods: the EAN Network and the PEP system (*i.e.*, the daisy chain). *See 1994 Report and Order* at 10 FCC Rcd 1833-34, para. 130. The PEP system was designed to serve as the backup to the EAN Network. *See* Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System, *Notice of Proposed Rule Making*, 16 FCC Rcd. 7255, 7264-65, para. 29 (2001) (*2001 NPRM*). The EAN Network consisted of a dedicated (wireline) communications service connecting government activation points to broadcast networks, newswire services, and common carriers, which in turn redistributed the EANs to EBS participants. *See 2002 Report and Order*, 17 FCC Rcd 4055, 4078-79, para. 62. Radio and television broadcast networks used their internal communications facilities to disseminate the EAN to all affiliates. The AP and UPI radio wire teletype networks further disseminated the EAN to all subscribers (AM, FM, TV broadcast, and other stations). AM, FM, and TV broadcast stations and other licensees and regulated services further disseminated the EAN via off-the-air monitoring. *See* 47 C.F.R. § 73.931 (1976), as codified by Revision of Parts 1 and 73 of the Commission's Rules to Update and Clarify the Rules Governing the Emergency Broadcast System (EBS), 41 Fed. Reg. 52,630, 52,634 (Nov. 30, 1976) (as set forth in the (continued….)

Commission adopted the EAS rules in 1994, it carried over this framework for manually processing EANs – including the use of the EAT[336] – from the EBS rules into section 11.54, primarily because EANs were then still carried over a separate network.[337] Accordingly, while the EAS rules provide for automated processing of EAS messages and use the EOM to terminate EAS messages, section 11.54 is still structured for manual processing of EANs, using the EAT to return EAS equipment to regular programming.

144. The manual processing of EANs described in section 11.54, which anticipates capturing EAS equipment from receipt of an EAN until receipt of an EAT, does not translate well into an automated system, which anticipates capturing EAS equipment from receipt of an EAN until receipt of an EOM. Further, while the EAS rules permit manual operation of EAS equipment, which theoretically would allow EAS Participants to better follow the procedures in section 11.54(b), there is no indication that EAS Participants actually operate EAS equipment manually. As Timm pointed out, "[t]he EAT was implemented with the vision that most broadcast stations are manned, which is no longer the case."[338] Moreover, whereas section 11.54 establishes an indeterminate time period during which EAS Participant facilities are reserved for airing various EAS messages, we observe that, whether in automated or manual mode, EANs can simply terminate with the EOM, allowing for resumption of regular programming until another EAS message arrives. As Timm observed, if there is a need to reserve EAS Participants' facilities for distribution of an ongoing or multiple Presidential messages, the EOM can be delayed until such time as this need has passed.[339] As observed by various parties responding to the *Part 11 Public Notice*, the obsolescence of the EAT, and by extension, the framework for processing EANs in section

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1994 Report and Order, Appendix E at para. 6, section 73.931 was deleted and divided into sections 11.14 and 11.53). Upon receiving an EAN from one of these sources, EBS participants manually discontinued regular programming and broadcast a "common emergency program," which was comprised of whatever feeds they were receiving from a list of prioritized sources. *See id*. at 52,634-35, § 73.933(b)(5)(i) (as set forth in the *1994 Report and Order*, Appendix E, section 73.933 was deleted and renumbered as section 11.54). Stations would resume regular programming upon receipt of the EAT. *See id*.

[336] *See* 47 C.F.R. § 73.907 (1976), as codified by Revision of Parts 1 and 73 of the Commission's Rules to Update and Clarify the Rules Governing the Emergency Broadcast System (EBS), 41 Fed. Reg. 52,630, 52,632 (Nov. 30, 1976). When the Part 11 EAS rules were established, section 73.907 was deleted and merged into section 11.13. *See 1994 Report and Order*, Appendix E.

[337] *See* 47 C.F.R. § 11.54(b). The EAS rules continued the approach developed for the EBS primarily because at the time the Commission adopted the EAS rules, the primary means for disseminating EANs was the same as it was under the EBS rules: specifically, the EAN Network. *See 1994 Report and Order* at 10 FCC Rcd 1833-34, para. 130. Accordingly, while the EAS rules generally provided for automated operation using the EOM, section 11.54 anticipates that EANs will be processed manually because there was no analog to automated processing of EANs under the EBS rules and EAN Network. In 1995, FEMA began phasing out the EAN Network, making the PEP system the exclusive distribution network for the national level EAS alerts. *See 2001 NPRM* at 16 FCC Rcd 7264-65, para. 29 (*citations omitted*). The Commission revised the EAS rules to eliminate references to the EAN Network in 2002; however, it left the basic framework for commencing a National Level emergency condition – starting with the EAN, ending with the EAT, and in between broadcasting a "common emergency message" – in place. *See, e.g.*, *2002 Report and Order*, Appendix B (deleting provisions related to the EAN Network from section 11.54, but otherwise leaving the framework for manually processing EANs intact).

[338] Timm Reply Comments at 8. *See also id*. at 7 ("[T]he FCC needs to revise its National EAS Activation procedure to account for the fact that all cable systems and vast numbers of broadcasters operate in automatic unattended mode."). At the time the Commission adopted the EAS rules, unattended operation of broadcast stations was not permitted, a subject that was actually taken up in a companion item to the order in which itadopted the EAS rules. *See 1994 Report and Order* at 10 FCC Rcd 1822-23, para. 103.

[339] *See id*.

11.54, was seen during the January 2010 Alaska EAN test, during which EAS equipment returned to normal operating status despite the fact that no EAT was sent.[340]

145. We therefore seek comment regarding whether we should substantially simplify the procedures for processing EANs set forth in section 11.54 and related Part 11 rule sections so that EAS Participants process EANs like any other EAS message, only on a mandatory and priority basis. Under this streamlined EAN processing approach, whether EAS Participants operate their EAS equipment in automated or manual mode, receipt of an EAN would effectively open an audio channel between the originating source and the EAS Participant's facilities until the EAS Participant receives an EOM.[341] After the EAS Participant receives the EOM, the EAS equipment would return to regular programming until receipt of the next EAS message. If that message is another EAN, then the process would repeat; if that message is a state or local EAS message, including a gubernatorial CAP-formatted message, then that message would be aired in accordance with the specifications in the State and/or Local Area EAS Plan. Are there reasons to maintain the framework in section 11.54 for reserving EAS Participant facilities for extended periods of time? Is that framework technically feasible for implementation in EAS equipment? Does that framework make any sense for automated operation of EAS equipment? Does this framework make sense for CAP-formatted messages received as RSS feeds?

146. We also invite comment on whether we should eliminate the option for EAS Participants to manually process EANs (but not state or local EAS messages). Is there any practical or technical reason to maintain the option to set EAS equipment to manual mode for EANs? Would eliminating the manual mode for EANs reduce the risk of operator errors in the processing of EANs? How many EAS Participants operate their EAS devices in manual mode for EANs? Is an EAS Participant more likely to process a SAME-formatted or CAP-formatted message in manual mode, or does it not make a difference? Would message-by-message processing of EANs have any impact on CAP-to-SAME translation? For example, would message-by-message processing of EANs require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would using message-by-message processing potentially make some deployed EAS equipment obsolete? If so, what percentage?

147. It appears that the EAT would serve no purpose when there is streamlined, message-by-message processing of EANs.[342] Accordingly, we seek comment on whether we should eliminate the EAT and replace it where necessary with the EOM in the Part 11 rules. For example, are the current decoder display requirements for the EOM sufficient to alert EAS Participants operating in manual mode that they have received the EOM?[343] If not, should we add display or audio alerting requirements to serve

[340] As Monroe stated, "In the recent Alaska test, an EAT was never issued. The task of terminating the active EAN alert was left to the EAS duration field. In the Alaska EAN test, the duration was set to the minimum time of 15 minutes. So by the Part 11 spec, this EAN never really terminated. Yet, EAS encoder/decoders in the field did appear to expire the EAN alert after 15 minutes without the EAT." Monroe Comments at 4-5. *See also* Timm Reply Comments at 8 ("It is also noteworthy that the federal government did not even send an EAT Event Code as part of the recent Alaska Test. Thus the EAT does not appear to be a truly essential part of the National EAS Activation procedure even to federal officials, which was proven correct in that the test was conducted successfully without it.").

[341] *See*, *e.g.*, 47 C.F.R. § 11.52(e).

[342] In the *National Test Order*, we delegated authority to the Bureau to determine, in conjunction with FEMA and other EAS stakeholders, whether to use the EAT event code in the first and subsequent national tests. *See National Test Order* at para. 28. Our solicitation of comments concerning the processing of EANs in this item does not affect that decision, which was issued in the limited context of preparing for a national test of the EAS.

[343] We observe that section 11.54(b)(2)(ii) specifies that Non-participating National (NN) stations signing off the air following receipt of an EAN must monitor for the EAT; however, we are unaware of any technical or practical (continued….)

this purpose? Does it matter whether the EAN is SAME-formatted or CAP-formatted? Would deletion of the EAT have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would such deletion potentially make deployed legacy EAS equipment obsolete?

148. *Revising Section 11.54*. With respect to the procedures in section 11.54, we observe that adopting message-by-message processing of EANs would render sections 11.54(b)(1), (3), (4), (10), and 11.54(c) superfluous. Specifically, section 11.54(b)(1) sets forth monitoring requirements which are already spelled out in section 11.52(d) and the State Area EAS Plan;[344] Section 11.54(b)(3) and (10) establishes "common emergency message" procedures that we would eliminate were we to adopt message-by-message EAN processing;[345] Section 11.54(b)(4) requires airing of certain standby scripts in between airing common emergency messages, which has no relevance if we eliminate section 11.54(b)(3);[346] Section 11.54(b)(c) requires adherence to the termination procedures in the EAS Operating Handbook upon receipt of an EAT, and we are seeking comment about whether to eliminate the EAT.[347] In addition, these provisions would not be necessary for automated or manual operation of EAS equipment to process EANs using the EOM to terminate the EAN.

149. Accordingly, we seek comment on whether we should delete sections 11.54(b)(1), (3), (4), (10), and 11.54(c). Are the provisions (as revised to delete the references to the EAT) in sections 11.51(m) and 11.52(d) and (e) sufficient to ensure manual processing of EANs on a message-by-message basis? If we were to delete sections 11.54(b)(1), (3), (4), (10), and 11.54(c), would we need to make any additional revisions to the Part 11 rules to facilitate manual processing of EANs on a message-by-message basis? Would deletion of these provisions have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would such deletion potentially make some amount of deployed EAS equipment obsolete? If so, what percentage? Would deleting sections 11.54(b)(1), (3), (4), (10), and 11.54(c) present costs or burdens to equipment manufacturers and/or EAS Participants that could be ameliorated by alternative approaches that achieve the same goals of streamlining the Part 11 rules and removing outdated provisions therein to enhance the overall effectiveness and functionality of the EAS?

150. We seek comment on whether our proposed approaches to revising the procedures for processing EANs are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to revising the procedures for processing EANs be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

151. *Deleting Section 11.42*. We also observe that section 11.42(b) specifies that the EAT is used to apprise "communications common carriers" that they must disconnect certain temporary

(Continued from previous page)
reason why any station monitoring for an EAT could not instead monitor for an EOM. *See* 47 C.F.R. § 11.54(b)(2)(ii).

[344] *See* 47 C.F.R. §§ 11.54(b)(1), 11.52(d), 11.21(a).

[345] *See id*. § 11.54(b)(3), (10).

[346] *See id*. § 11.54(b)(4).

[347] *See id*. § 11.54(c).

connections between EAS Participants and selected "Test Centers."[348] This provision (like all of section 11.42) was carried over from the former EBS rules and is designed to facilitate the transmission of EANs via landlines.[349] Timm argued that this rule section is no longer relevant. Specifically, Timm explained, "In the past, broadcast stations were wired to 'Telco Test Boards' where many audio feeds were available for interconnections[, whereas] [t]oday, broadcast stations no longer have audio connections to the telephone exchanges, with most audio now being received via satellite direct at each broadcast station."[350] Timm suggested that this section has become irrelevant and should be deleted altogether.[351] We observe that the EAS Participants no longer use test provisions and transmission paths facilitated by section 11.42.[352] We therefore seek comment on whether section 11.42 no longer serves any purpose in the EAS and whether we should therefore delete it. What are the potential costs and benefits of deleting section 11.42? How could any requirements we might consider with respect to deleting section 11.42 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

152. *Elminating the EAS Operating Handbook*. As specified in section 11.15, the FCC issues the EAS Operating Handbook, which summarizes the actions personnel at EAS Participant facilities must take upon receipt of an EAN, EAT, tests, and state and local area alerts.[353] EAS Participants are required to maintain a copy of the handbook at their facilities for manual processing of EAS messages.[354]

153. As a corollary to its suggestion that we delete the EAT, Timm observed that "if the National EAS is treated like any other EAS alert (Event Code followed by an EOM)," there would no longer be any National EAS Activation procedure to follow, and thus "there would be nothing left to describe in the EAS Operating Handbook regarding the National EAS Activation."[355] Timm further stated that the "other section of the EAS Operating Handbook deals with generic state and local EAS activation procedures," which he asserts could be eliminated in favor of requiring EAS Participants to post State and Local Area EAS Plans at their facilities (just as EAS Participants are currently required to post the EAS Operating Handbook).[356] TFT agreed that if we eliminate the EAT, then we should also

[348] *See* 47 C.F.R. § 11.43(b).

[349] *See* 47 C.F.R. § 73.927 (1976), as codified by Revision of Parts 1 and 73 of the Commission's Rules to Update and Clarify the Rules Governing the Emergency Broadcast System (EBS), 41 Fed. Reg. 52,630, 52,633-34 (Nov. 30, 1976) (as set forth in the *1994 Report and Order*, Appendix E, section 73.927 was deleted and merged into section 11.42).

[350] Timm Reply Comments at 10.

[351] *Id*.

[352] When the Commission amended the Part 11 rules to eliminate references associated with the EAN Network, it eliminated the closed circuit test provisions for testing the EAN distribution, originally codified at sections 11.42(c) and 11.62, but left the existing language related to common carriers intact. *See 2002 Report and Order*, 17 FCC Rcd 4055, Appendix B (Rule Changes). Regardless of how broadcast stations receive their audio feeds, if common carriers were relying upon the receipt of EATs, they would necessarily require an EAS decoder, in which case they would receive and could use the EOM instead.

[353] *See* 47 C.F.R. § 11.15.

[354] *Id*.

[355] Timm Reply Comments at 9.

[356] *Id*. Other parties also proposed that EAS Participants be required to maintain copies of the relevant State and Local Area EAS Plans. *See, e.g.*, Abbott-Gutierrez Comments at 1.

eliminate the EAS Operating Handbook.[357] We observe that while the EAS Operating Handbook outlines operational procedures that are already contained in the Part 11 rules, and in this sense may be redundant, it is unique in that it provides the announcements that EAS Participants are required to make at various points during manual processing of an EAN during a National Level emergency condition.[358]

154. The EAS Operating Handbook may not serve any purpose with respect to the streamlined processing of EANs, on which we seek comment above. Specifically, the various procedures and announcements set forth in the EAS Operating Handbook were developed for the manual processing of EANs during the National Level emergency condition, and we are seeking comment on whether to eliminate the manual processing of EANs.[359] In the context of the National Level emergency condition specified in section 11.54, these announcements and standby script make sense because, as explained above, EAS Participant facilities are dedicated to airing only emergency messages that might involve multiple (President, state, and local) sources over an indeterminate period of time.[360] If regular programming is only interrupted on a message-by-message basis, however, the announcements would simply apprise viewers and listeners of the start and stop of the President's audio message, which presumably will be readily apparent to viewers and listeners. Moreover, it does not appear technically feasible for EAS equipment operating in automatic mode to insert such announcements before and after the Presidential message.[361] In any event, the message originator can incorporate any special announcements into the audio message.

155. Accordingly, if we were to adopt the message-by-message processing of EANs described above, we seek comment on whether we should eliminate the EAS Operating Handbook and whether we should require EAS Participants to maintain within their facilities a copy of the current, FCC-filed and approved versions of the State and Local Area EAS Plans. If we were to eliminate the EAS Operating Handbook, but did not eliminate the NN category of EAS Participants, what specific action(s), if any, should we require NN stations to take in between receipt of an EAN's header codes and its corresponding EOM?[362]

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[357] *See* TFT Reply Comments at 2. TFT also observes that the reference to "authenticating messages" in section 11.20 is irrelevant and urges us to delete it. *See* TFT Comments at 3.

[358] *See*, *e.g.*, EAS 2007 TV (including Digital TV) Handbook at 7, 10, 13, 15, and 20, *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-278628A5.pdf.

[359] The standby script specified in section 11.54(b)(4), 47 C.F.R. § 11.54(b)(4), would serve no purpose if the EAT were eliminated, because stations would not be airing the "common emergency message" specified in section 11.54(b)(3), 47 C.F.R. § 11.54(b)(3).

[360] *See* 47 C.F.R. § 11.54(b).

[361] *See*, *e.g.*, 47 C.F.R. § 11.51(m) (specifying, among other things, that an EAN message "shall be retransmitted unchanged except for the LLLLLLLL code which identifies the EAS Participant retransmitting the message" (*cross-referencing* 47 C.F.R. § 11.31(c)). *See also* Timm Comments at 5 ("[W]hen an EAS endec receives an EAN code, it immediately interrupts station programming and puts that EAN alert audio on the air. At most broadcast stations, the studio audio feed is looped through the EAS endec. So for an EAN alert, the studio audio console is cut off from going on the air, with precedence being given to the EAN audio. Thus, it is not possible for individual broadcast stations to air the announcements in the EAS Operating Handbook until an EOM code is received after the EAN alert has finished."). Neither the EAS Protocol nor the Part 11 rules provide for inserting announcements before the audio message and after the EOM associated with an individual EAS message. *See*, *e.g.*, 47 C.F.R. § 11.31(a) and (c) (specifying that the EAS uses a four-part message and that the "EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization").

[362] The Part 11 rules currently require NN sources to follow the transmission procedures and make sign-off announcements set forth in the EAS Operating Handbook. *See* C.F.R. §§ 11.18(f), 11.54(b)(2)(ii).

156. Would posting the State and Local Area EAS Plans provide sufficient detail to EAS Participants about how they must manually operate or set EAS equipment for state and local EAS messages? Since EAS Participants that take part in the state EAS systems already adhere to these plans, would it be necessary, in the absence of the EAS Operating Handbook, to require that they maintain copies of these plans? Is it practical for EAS Participants to maintain up-to-date copies of the State and Local Area EAS Plans?

157. If we were to eliminate the EAS Operating Handbook, could we also delete the related provisions in section 11.54(a), (b)(2), and (5)-(8)? Specifically, section 11.54(a) indicates that the EAS Operating Handbook summarizes the procedures to be followed upon receipt of an EAN and EAT, which is superfluous if we were to delete the EAS Operating Handbook;[363] section 11.54(b)(2) requires EAS Participants to follow EAS Operating Handbook procedures and would also be superfluous if we were to delete the EAS Operating Handbook;[364] section 11.54(b)(5)-(8) sets forth certain requirements related to the announcements contained in the EAS Operating Handbook and, as with the foregoing sections, is superfluous if we were to delete the EAS Operating Handbook.[365]

158. Accordingly, if we were to delete the EAS Operating Handbook, we seek comment on whether we should also delete sections 11.54(a), (b)(2), and (5)-(8). For example, would deletion of these provisions have any impact on CAP-to-SAME translation? Would deleting these provisions require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would such deletion potentially make deployed EAS equipment obsolete? If so, what percentage?

159. We seek comment on whether our proposed approaches to deleting the EAS Operating Handbook are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to deleting the EAS Operating Handbook be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

160. *Deleting Section 11.44*. Section 11.44 sets forth the priority scheme for EAS message transmissions during the period of national emergency triggered by an EAN and terminated by an EAT, as set forth in section 11.54.[366] According to section 11.44, during this period, EANs take priority over and preempt all other EAS messages.[367] Section 11.44(b) specifies that when a Presidential message is not being transmitted, EAS Participants are required to transmit all other EAS messages in the following order: first, Local Area Messages; second, State Messages; and, third, National Information Center (NIC) Messages.[368] Section 11.44(d) specifies that "[d]uring a national emergency, the facilities of all EAS Participants must be reserved exclusively for distribution of Presidential Messages," and "NIC messages received from national networks which are not broadcast at the time of original transmission must be

[363] *See id*. § 11.54(a).

[364] *See id*. § 11.54(b)(2).

[365] *See id*. § 11.54(b)(5)-(8).

[366] *See* 47 C.F.R. §§ 11.44, 11.54(b)(3).

[367] *See* 47 C.F.R. § 11.44(a).

[368] *See id*. § 11.44(b).

recorded locally by LP sources for transmission at the earliest opportunity consistent with the message priorities in [section 11.44(b)]."[369]

161. Parties responding to the *Part 11 Public Notice* raised various questions regarding these provisions. Trilithic asked, "What protocol mechanism is used for the EAS Encoder/Decoder to know what messages are Local Area or State," and whether "Local Area Messages [should] preempt (terminate and replace) incoming or outgoing State Messages."[370] Trilithic further observed, "The phrase 'in the following order' [in section 11.44(b)] implies that an EAS Encoder/Decoder can store multiple EAS messages and send them out in a different order than they were received" and asked whether this was the intent of the provision.[371] Timm sought clarification as to whether the language of section 11.44(d) sets up NIC messages as "a third National must-carry Event Code."[372] Trilithic stated, "Multiple references in the Commissions rules, and in the EAS Handbooks stress the importance of monitoring local channels during a national emergency, yet this section [11.44(d)] seems to indicate that the only messages heard will be 'Presidential Messages.'"[373]

162. The priority scheme set forth in section 11.44 was intended to apply during the National Level emergency condition codified in section 11.54, which is initiated by the EAN and terminated by the EAT.[374] As discussed above, section 11.54, as currently drafted, anticipates manual processing of EAS messages. If we were to revise section 11.54 to reflect a streamlined, message-by-message processing approach, section 11.44 would become superfluous. In that case, regardless of whether EAS Participants operate their EAS equipment in automated or manual mode, receipt of an EAN would effectively open an audio channel between the originating source and the EAS Participant's facilities until the EAS Participant receives an EOM, at which point the EAS equipment would return to regular programming. If an EAS Participant were to receive a subsequent EAN, then the process would repeat; if that message were a state or local EAS message, including a gubernatorial CAP-formatted message, then the EAS Participant would air that message in accordance with the specifications in the State and/or Local Area EAS Plan. In all events, EANs would have priority over state and local EAS messages (including gubernatorial CAP-formatted messages).

163. Accordingly, we seek comment on whether we should delete section 11.44. Whether processed automatically or manually, EANs must have priority status over all other programming and EAS alert messages. We seek comment on whether the existing provisions in other sections of Part 11 sufficiently confer priority status to EANs and whether we should make any changes to existing provisions to ensure that EANs maintain primary status.[375] What are the potential costs and benefits of

[369] *Id*. § 11.44(d).

[370] Trilithic Comments at 5.

[371] *Id*.

[372] *Id*.

[373] *Id*.

[374] *See* 47 C.F.R. § 11.54(b)(3).

[375] *See, e.g.*, 47 C.F.R. § 11.33(a)(11) (requiring, with respect to decoders, that "[a] header code with the EAN Event code specified in § 11.31(c) that is received through any of the audio inputs must override all other messages"); 47 C.F.R. § 11.51 (m)(2), (n) (requiring that encoders air EANs "immediately" whether operating in automatic or manual mode); 47 C.F.R. § 11.52 (e), (e)(2) (requiring that EAS Participants interrupt "normal programming" when an EAN is received "immediately" when operating in manual mode (no time period is expressed for interrupting normal programming in automatic mode)).

deleting section 11.44? How could any requirements we might consider with respect to deleting section 11.44 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

164. *Revising Section 11.53*. Section 11.53 specifies how EANs are initiated at the federal, state, and local levels for purposes of triggering the national level emergency procedures in section 11.54.[376] In particular, this section indicates that, at the national level, EAN messages are sent from a government origination point to broadcast stations and other entities participating in the PEP system and then disseminated by EAS Participants.[377] This section further requires that EAN messages originate from state and local governments in accordance with State and Local Area EAS plans.[378] We seek comment as to whether this section has any relevance in the streamlined EAN processing model on which we are seeking comment above.

165. To the extent section 11.53 is relevant in its own right and that we should retain it, we seek comment on whether we should revise it to incorporate CAP-formatted EAN messages. We observe that, unlike PEP-originated SAME-formatted EAN messages distributed over the air, under the monitoring approach tentatively proposed in this item, EAS Participants will obtain CAP-formatted EAN messages from the RSS feed(s) utilized by the IPAWS system for EAS distribution. If we retain section 11.53, should we include a cross-reference to section 11.52 to capture the federal CAP-formatted EAN origination process? Although it is unclear exactly how states might originate CAP-formatted EAN messages, whatever method applies will be set forth in the State Area EAS Plan, just as the SAME-based distribution method is today.[379] Accordingly, we seek comment on whether the existing language on state EAN origination would be sufficient to capture CAP-formatted EANs originated by state CAP systems. What are the potential costs and benefits of revising section 11.53? How could any requirements we might consider with respect to amending section 11.53 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

166. *Revising Section 11.11(a)*. We also seek comment on whether, if we were to streamline EAN processing, we should revise section 11.11(a) to remove the references therein to "participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels."[380] In the EBS, these entities disseminated instructions to EAS Participants following receipt of an EAN, but it is not clear whether they have any role in the current EAS or in the streamlined version of EAN processing we are contemplating here.[381] What are the potential costs and benefits of revising section 11.11(a)? How could

[376] 47 C.F.R. § 11.53.

[377] *See id*.

[378] *See id*. § 11.53(b).

[379] As noted above, the issue of whether local, county, tribal, or other state governmental entities should be allowed to initiate mandatory CAP-formatted state and local alerts will be addressed in the item responding to the *Next Generation EAS FNPRM*. *See supra* note 167.

[380] 47 C.F.R. § 11.11(a).

[381] *See*, *e.g.*, 47 C.F.R. § 73.931 (1976), as codified by Revision of Parts 1 and 73 of the Commission's Rules to Update and Clarify the Rules Governing the Emergency Broadcast System (EBS), FCC 76-1053, 41 Fed. Reg. 52,630, 52,634 (Nov. 30, 1976); 47 C.F.R. § 11.43 (1985), as originally codified by Emergency Broadcast System, 59 Fed. Reg. 67,090, 67,098 (Dec. 28, 1994). When the Commission amended the Part 11 rules to eliminate (continued….)

any requirements we might consider with respect to amending section 11.11(a) be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

167. *Deleting Section 11.16*. Section 11.16 describes the "National Control Point Procedures," which are "written instructions issued by the FCC to national level EAS control points," covering National Level EAS Activation, EAS Test Transmissions and the National Information Center (NIC).[382] These instructions (and this rule section) essentially are the standard operating procedures used in the EBS for manually activating, terminating, and testing national-level messages (*i.e.*, EANs).[383] More specifically, the Commission developed these procedures for manual processing of EANs sent over the EAN Network, which as discussed above, may no longer have any relevance.[384] Accordingly, as with other Part 11 rule sections dedicated to manual EAN processing discussed above that have become outdated and outmoded, we seek comment on whether we should delete section 11.16, along with section 11.54(b)(12), which requires LP (*i.e.*, PEP) stations to adhere to the National Control Point Procedures following receipt of an EAN.[385] What are the potential costs and benefits of deleting section 11.16? How could any requirements we might consider with respect to deleting section 11.16 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

G. Miscellaneous Part 11 Revisions Not Related to CAP

168. In this section, we seek comment on potential revisions to various provisions in Part 11 that are not related to CAP. We propose these revisions to streamline our EAS rules and to remove ambiguities. With respect to each, we encourage commenters to consider whether our proposed approaches are necessary in a proceeding primarily concerned with the CAP-related obligations we address herein. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

169. *Definitions*. Timm asked whether we should revise the definition of Local Primary One (LP-1) stations in section 11.2(b), which defines such stations as radio stations, to reflect that these stations can be radio or TV stations.[386] Our review of State Area EAS Plans confirms Timm's

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references associated with the EAN Network, it eliminated the specific references to various broadcast networks and other voluntary participants in the EAN Network originally identified in section 11.43 but left the broad language capturing these entities in section 11.11(a) intact. *See 2002 Report and Order*, 17 FCC Rcd 4055, Appendix B.

[382] 47 C.F.R. § 11.16.

[383] *See*, *e.g.*, 47 C.F.R. § 73.909 (1976), as codified by Revision of Parts 1 and 73 of the Commission's Rules to Update and Clarify the Rules Governing the Emergency Broadcast System (EBS), FCC 76-1053, 41 Fed. Reg. 52,630, 52,632 (Nov. 30, 1976) (as set forth in the *1994 Report and Order*, Appendix E, section 73.909 was deleted and renumbered as section 11.16).

[384] *See supra* notes 335, 337. The "National Control Point Procedures" were the instructions for the participating radio and television networks, cable networks and program suppliers, common carriers, and wire services through which EANs were then distributed. *See* 47 C.F.R. § 11.16 (1985), as originally codified by Emergency Broadcast System, 59 Fed. Reg. 67,090, 67,094 (Dec. 28, 1994).

[385] *See* 47 C.F.R. § 11.54(b)(12).

[386] Timm Comments at 8.

assessment. Accordingly, we seek comment on whether we should revise the definition for LP-1 stations in section 11.2(b) to reflect that these stations can be a radio or TV station.

170. Commenters made various proposals with respect to the definition of the PEP system in section 11.2(a).[387] This section currently defines the PEP system as "a nationwide network of broadcast stations and other entities connected with government activation points" that is used to "distribute the EAN, EAT, and EAS national test messages and other EAS messages."[388] The definition also explains that "FEMA has designated 34 of the nation's largest radio broadcast stations as PEPs," which are "designated to receive the Presidential alert from FEMA and distribute it to local stations."[389] The PEP system is also defined in section 11.14, which mirrors most of the language in section 11.2(a).[390]

171. CSRIC recommended that we "[u]pdate [the] PEP definition to be consistent with FEMA implementation and future plans."[391] CSRIC also recommended, with respect to section 11.14, that we "[m]odify [the] PEP paragraph to include [a] reference requiring IPAWS interconnectivity."[392] Timm observed that the number of stations referenced in the definition "should be updated, or perhaps a number should not be listed as FEMA continues to expand the number of PEP stations."[393] TFT stated, "Because State, local relay networks, and other program distribution networks may serve as entry points for Presidential messages, the wording should permit rather than restrict these sources."[394]

172. As a preliminary matter, because the PEP system definition in section 11.14 mirrors the definition in section 11.2(a), it is superfluous. Accordingly, we tentatively conclude that we should delete section 11.14 from the Part 11 rules. We seek comment on this tentative conclusion.

173. With respect to the PEP system definition in section 11.2(a), we seek comment on whether the use of actual numbers to reflect the number of PEP stations is so inflexible that it requires revision via an amendment to the rule every time FEMA adds another station to the PEP system and whether we should delete the numerical reference.[395] With respect to CSRIC's recommendation that we incorporate IPAWS connectivity into the current PEP system definition, it is not clear what purpose that would serve, as the PEP stations only distribute SAME-formatted EAS messages. Instead, we seek comment on whether we should revise the language in section 11.2(a) to clarify that the PEP stations distribute the EAN, EAS national test messages, and other EAS messages in accordance with the EAS Protocol requirements in section 11.31.

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[387] 47 C.F.R. § 11.2(a).

[388] *Id*.

[389] *Id*.

[390] Specifically, section 11.14 reprints the first two sentences in section 11.2(a). *Compare* 47 C.F.R. § 11.2(a) *with* 47 C.F.R. § 11.14.

[391] *CSRIC Final Report*, § Sec. 5.1.

[392] *Id*.

[393] Timm Comments at 8. *See also* TFT Comments at 1; TAB Comments at 6.

[394] TFT Comments at 2.

[395] As noted above, FEMA has indicated that it will expand the number of PEP stations to over 80 stations. *See supra* note 31.

174. Although not raised by any commenter, we also seek comment on whether we should delete section 11.13 and fold the definition of EAN into section 11.2. Specifically, section 11.13 defines the EAN and EAT.[396] We are seeking comment above on whether we should delete references to the EAT from the Part 11 rules.[397] Because the common definitions used throughout Part 11 are properly included at the beginning of the Part 11 rules, in section 11.2, we seek comment on whether we should delete section 11.13 and move the definition for the EAN currently in section 11.13 to section 11.2.

175. *Geographic Codes*. Section 11.31(c) specifies the message formatting requirements for the EAS Protocol, including the formatting of the location code.[398] This section (and section 11.31(f)) currently indicates that the location code "uses the Federal Information Processing Standard (FIPS) numbers as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6–4.FIPS number codes."[399] TFT observed that the "[FIPS] publication has been replaced by American National Standards Institute (ANSI) Codes INCITS 31.200x (Formerly FIPS 6-4), Codes for the Identification of Counties and Equivalent Entities of the United States, its Possessions, and Insular Areas" and suggested that we replace the references to FIPS in the rules with references to the relevant ANSI standard.[400] We tentatively agree with TFT that the FIPS reference is outdated. Accordingly, we tentatively conclude that we should change the references to the FIPS standard in section 11.31 (and 11.34(d)) to reflect the ANSI standard that superseded it. We seek comment on this tentative conclusion.[401]

176. *Attention Signal*. We received various proposals relating to the Attention Signal requirements. Section 11.32(a)(9) sets forth specifications regarding, among other things, tone frequencies, harmonic distortion limit, and transmission time period for Attention Signal generators in encoders.[402] Trilithic stated, "This section appears to be an attempt to maintain compatibility with EBS" and further observed that "[s]ome requirements (Indicators, protection from inadvertent activation, etc) may no longer be needed and should be eliminated from the requirements."[403]

177. Section 11.33(b) specifies Attention Signal requirements for decoders.[404] Trilithic recommended "eliminating the demuting requirements for the Attention tone as this EBS compatible function is no longer needed"; "NOT attempting to detect the Attention tone outside of the FSK

[396] *See* 47 C.F.R. § 11.13.

[397] *See supra* para. 147.

[398] *See* 47 C.F.R. § 11.31(c).

[399] *Id.*

[400] TFT Comments at 4. *See also* Trilithic Comments at 5.

[401] We observe that a few parties proposed that we adopt the "000000" location code to represent "all U.S." *See, e.g.*, Monroe Comments at 4. In the *National Test Order*, we concluded that "a national location code is desirable, and that 000000 eventually may prove to be useful as such a code, but that it is not clear that 000000 is a presently feasible solution," due to uncertainty regarding whether encoder/decoder devices at critical points of the EAS (PEP, LP, etc.) can correctly process and retransmit a national level alert using an all zero location code. *National Test Order* at para. 32. Accordingly, we declined to adopt "000000" as the national code and instead delegated authority to the Bureau to determine – in collaboration with FEMA – "which location code, or codes, will be used for the first national EAS test and also which code or codes should be used for subsequent national tests." *Id*.

[402] *See* 47 C.F.R. § 11.32(a)(9).

[403] Trilithic Comments at 3.

[404] *See* 47 C.F.R. § 11.33(b).

Header/EOM Envelope to prevent spurious reception"; and "[c]onsider[ing] remove[al] [of] all references to detecting and indicating the Attention Tone since it is now used only as an alert to the listener."[405]

178. The Commission derived the Attention Signal specifications in sections 11.32(a)(9) and 11.33(b) from the Attention Signal specifications in the EBS rules.[406] In the EBS, the Attention Signal was used both to initiate processing of emergency alerts and to alert the public that an EAS Participant was about to air an emergency message.[407] When the Commission adopted the EAS, we retained the Attention Signal specifications to account for the phase-out of EBS equipment.[408] From January 1, 1998, forward, however, the EAS architecture has used the Attention Signal exclusively for alerting the public that an EAS Participant is about to air an emergency audio message.[409] Given the limited purpose of the Attention Signal in the EAS, we seek comment on whether we can delete most of the current provisions relating to the Attention Signal in sections 11.32(9) and 11.33(b) in favor of the minimal standard currently set forth in the EAS Protocol (at section 11.31(a)(2)). Were we to do this, we could incorporate any Attention Signal provisions in sections 11.32(9) and 11.33(b) that remain relevant into section 11.31(a)(2).[410] For example, because the Attention Signal is no longer used to activate circuitry within a decoder, as was the case in the EBS, it seems superfluous to maintain the demuting-related specifications in section 11.33(b).[411] We seek comment on this proposal.

179. Which, if any, of the equipment-related Attention Signal requirements in sections 11.32(9) and 11.33(b) should we incorporate into section 11.31(a)(2)? For example, should we incorporate the specification covering the duration of the Attention Signal in section 11.32(9)(iv) into section 11.31(a)(2)? Should we modify the duration limits for the Attention Signal, currently set at between 8 and 25 seconds? Could 25 seconds be too long to wait for emergency information in a situation where time is of the essence? Could we effect changes or deletions to any of these parameters in legacy EAS equipment via software or firmware upgrades? What effect, if any, would such changes potentially have on deployed EAS equipment? Would changing the Attention Signal parameters have any impact on CAP-to-SAME translation? For example, would such action require the ECIG to amend the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted messages?

180. We also seek comment on whether we should delete the Attention Signal from the Part 11 rules altogether. Is an audio signal necessary or useful to alert listeners that an EAS Participant is

[405] Trilithic Comments at 3; *see also* TFT Comments at 6.

[406] *See* 47 C.F.R. §§ 73.940, 73.941 (1976), as codified by Revision of Parts 1 and 73 of the Commission's Rules to Update and Clarify the Rules Governing the Emergency Broadcast System (EBS), 41 Fed. Reg. 52,630, 52,636 (Nov. 30, 1976) (as set forth in the *1994 Report and Order*, Appendix E, sections 73.940 and 73.941 were deleted and renumbered as sections 11.42 and 11.43).

[407] Specifically, PEP stations broadcasted the Attention Signal, along with an audio message. The Attention Signal served two functions: (i) it triggered circuitry within decoders deployed at stations monitoring the PEP stations to activate an audio alarm that alerted station personnel that an incoming EBS audio message was arriving (the station personnel would in turn broadcast an Attention Signal, using an Attention Signal generator, and rebroadcast the EBS audio message originally broadcast by the PEP station); and (ii) it served as an audio alert signal to listeners and viewers that an EAS Participant was about to air an emergency broadcast. *See 1994 Report and Order* at 10 FCC Rcd 1790, para. 8.

[408] *See id*. at 1819, para. 96.

[409] *See id*. at 1814-15, para. 81.

[410] *See* 47 C.F.R. § 11.31(a)(2).

[411] *See* 47 C.F.R. § 11.33(b).

about to air an audio message? If listeners can hear an attention signal, they presumably can hear the audio portion of the EAS message. Alternatively, has the two-tone Attention Signal, which has been a part of the national alerting systems in one form or another for several decades, become so ingrained that listeners have come to accept it and might question the authenticity of an EAS alert that lacked the Attention Signal? Does the Attention Signal benefit the vision-impaired community, which may rely more heavily on audible sources of emergency information? Would deleting the Attention Signal potentially make some amount of deployed EAS equipment obsolete because it could not be upgraded via software or firmware? If so, what percentage? Would deleting the Attention Signal have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted messages?

181. Regardless of whether or how we proceed with modifying the Attention Signal requirements, we observe that section 11.12, which specifies that EBS Attention Signal encoders and decoders can remain in operation until January 1, 1998, is obsolete. Accordingly, we tentatively conclude that we should delete section 11.12 from Part 11. We seek comment on this tentative conclusion. Is there any reason to keep section 11.12 in the rules?

182. *Miscellaneous Equipment Issues*. As detailed below, parties responding to the *Part 11 Public Notice* presented various suggestions and questions unrelated to CAP that involve the current encoder and decoder requirements.

183. *Section 11.33(a)(9)*. As described above, section 11.39(a)(9) allows EAS Participants to set their decoders to automatically reset to the monitoring state if the decoder does not receive an EOM for any given EAS message within a predetermined minimum time frame (not less than two minutes).[412] This reset function does not apply to EANs. This provision essentially allows EAS Participants to establish a maximum duration for state and local EAS messages that their equipment will air automatically (by ensuring that their EAS equipment will automatically reset for any state or local EAS messages exceeding such time period). Trilithic sought clarification regarding what happens on the encoder side of a combined decoder/encoder device when there is an automatic reset during receipt of an EAS message.[413] Specifically, Trilithic observed that "the term 'reset to monitoring' would seem to indicate that the message is logged but discarded (not retransmitted), however a reset on the decoder side does not guarantee this."[414] Accordingly, Trilithic asked whether "the message should automatically retransmit."[415]

184. By definition, the reset activation in section 11.33(a)(9) applies only when the EOM for a given EAS message has not arrived within the specified time period.[416] Transmitting an EOM is a minimum requirement for encoders.[417] Because there is no EOM associated with an EAS message that has been canceled via reset, there is no EOM for the encoder to transmit. Accordingly, as the rules are currently constructed, the encoder should not transmit an EAS message that has been canceled via reset. We seek comment on whether we should amend the rules to make this clearer or whether we should allow encoders to air EAS messages that have been canceled via reset. We observe that airing an EAS message

[412] *See* 47 C.F.R. § 11.33(a)(9).

[413] *See* Trilithic Comments at 4.

[414] *Id*.

[415] *Id*.

[416] *See* 47 C.F.R. § 11.33(a)(9).

[417] *See* 47 C.F.R. §§ 11.32(a), 11.51(a), (b).

that does not have an EOM runs the risk of airing a partial message that may cause confusion among listeners and viewers. On the other hand, a partial alert message may be better than none. We seek comment on these alternatives.

185. *Section 11.33(a)(3)(ii)*. Section 11.33(a)(3)(ii) specifies certain header code storage requirements for decoders.[418] Among other things, this section requires storage of the header codes of the last ten valid messages received by the decoder that still have valid time periods and deletion of header codes as their valid time periods expire.[419] TFT urged that we eliminate the requirement to delete messages upon expiration of their time periods because "there are cases in which such expired messages should be transmitted."[420] By way of example, TFT suggested that "a Tornado Warning may be received by an EAS Participant with a minimum validity and circumstances, [that] in the judgment of the EAS Participant, may warrant transmission of the message although expired or retransmission of the message."[421]

186. In general, the storage and deletion requirements in section 11.33(a)(3)(ii) facilitate comparison of incoming EAS messages, which among other things should help prevent the automatic relay of duplicate messages.[422] The alert message originator – not the EAS Participant – determines the valid time period specified for an alert.[423] While TFT explained that an EAS Participant might determine in its own judgment that an expired EAS message is valid for the listeners and/or viewers in its area, others might argue that may be a judgment best left to the state and local public safety authorities whose purpose, training, information, and resources are designed to facilitate such determinations. Accordingly, we seek comment on whether we should revise 11.33(a)(3)(ii) as proposed by TFT. Should we allow EAS Participants to air alert messages after expiration of the effective time period set by the alert message originator? Could we revise section 11.33(a)(3)(ii) in other ways to enhance its usefulness and relevance to EAS Participants?

187. *LPTV and LPFM*. Abbott-Gutierrez requested clarification on the EAS rules covering Low Power TV (LPTV) and Low Power FM (LPFM) stations, calling them "confusing at best."[424] After reviewing these rules, we observe that the analog and digital broadcast station equipment deployment table in section 11.11(a) incorrectly identifies "LPFM" in the column that is supposed to contain Class A TV[425] and incorrectly identifies "LPTV" in the column that should contain "LPFM." In addition, it appears that the Commission inadvertently omitted "LPFM" from the test requirements in section 11.61(a)(1)(i) (LPFM stations are only supposed to have to transmit test script, just like LPTV stations) and section 11.61(a)(2)(ii) (LPFM stations are only required to log receipt of the test, just like LPTV stations). We tentatively conclude that we should correct these clerical errors. We seek comment on this tentative conclusion.

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[418] *See* 47 C.F.R. § 11.33(a)(3)(ii).

[419] *Id*.

[420] TFT Comments at 5.

[421] *Id*.

[422] *See* 47 C.F.R. § 11.33(a)(10).

[423] *See* 47 C.F.R. § 11.31(c) (the time period is one of the EAS Header Codes contained in the EAS Protocol).

[424] Abbott-Gutierrez Comments at 2.

[425] The "LPFM" category should be on the right-hand side of the column header shown for "FM class D," which itself should be on the left-hand side (and the column header itself should be two separate headers rather than a single header covering two columns).

188. *Training*. Some parties responding to the *Part 11 Public Notice* called for the federal government to provide EAS training for state and local emergency managers.[426] While we remain committed to aiding FEMA in its efforts to develop training and public outreach programs for EAS Participants; state, local, and tribal alert warning authorities; and the public generally, the Commission lacks the authority to raise or distribute funds for EAS-related purposes.[427] We therefore tentatively conclude that the Commission cannot provide training for state and local emergency managers and seek comment on this tentative conclusion. In making this tentative conclusion, we draw the distinction between EAS (and other alert system training, such as that which FEMA will do for IPAWS), and the workshops and summits that the Commission holds as part of its outreach mission.

189. *Persons with Disabilities*. As indicated above, the Part 11 rules do not require a textual transcription of the audio portion of an EAS message, but instead currently require an EAS Participant to create a visual message (typically aired in the form of a video crawl) that conveys certain basic information that is derived from the EAS codes for the originator, event, location, and valid time period of the EAS message.[428] We recognize that the resulting message may not convey as much in the visual alert as in the audio portion due to the technical limitations inherent in the EAS and thus stands in tension with the Commission's policy that all members of the public receive equal access to emergency alerts. Although the scope of this proceeding does not extend to section 79.2 of our rules, which requires captioning or other visual displays of emergency information shown on video programming and audio output of emergency information provided visually, we note that the above-referenced discrepancy permitted under our Part 11 rules between the audio and visual alerts also may not fulfill the intent of section 79.2.[429] Each of these closely related rule provisions is intended to provide full accessibility to emergency alerts for people who are blind, deaf, or who have vision or hearing loss.

190. We plan to explore ways to address and reconcile issues concerning full access to alerts and other emergency information for people with disabilities in two upcoming proceedings. The first, a Notice of Inquiry on Broadband Alerting, will seek comment on how to leverage the Internet and

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[426] *See*, *e.g.*, NAB Comments at 4; Timm Comments at 12; TAB Comments at 2; NAB Reply Comments at 6; NSBA Reply Comments at 3-5; Timm Reply Comments at 5; TAB Comments at 2; TFT Reply Comments at 6.

[427] We observe that *Executive Order 13407* directs the Secretary of Homeland Security to conduct training related to the EAS, including "public education efforts so that State, territorial, tribal, and local governments, the private sector, and the American people understand the functions of the public alert and warning system and how to access, use, and respond to information from the public alert and warning system." *Executive Order 13407*, § 2(a)(vii). *See also id*. § 2(a)(viii).

[428] *See* 47 C.F.R. § 11.51(d), (g)(3), (h)(3), (j)(2). This is because visual EAS messages are typically pre-determined phrases programmed into the EAS equipment that correspond to specific EAS codes. For example, the visual depiction of the affected location described for the alert could be a given county, whereas the subject matter of the alert may actually be limited to a fractional area within that county. As a consequence, the information that is conveyed visually typically only reports the basic "who," "what," "when," and "where" associated with an audio EAS message and may not provide the specificity of the audio portion of an EAS message.

[429] *See* 47 C.F.R. § 79.2(b). Specifically, section 79.2 of the Commission's rules requires video programming distributors to provide individuals who are deaf and hard of hearing or blind or have low vision access to emergency information that such distributors provide to their viewers. Emergency information is defined as information about a current emergency that is intended to further the protection of life, health, safety, and property. *See* 47 C.F.R. § 79.2(a)(2). Critical details that must be provided in an accessible format include, but are not limited to, specific details regarding the areas that will be affected by the emergency, evacuation orders, detailed descriptions of areas to be evacuated, specific evacuation routes, approved shelters or the way to take shelter in one's home, instructions on how to secure personal property, road closures, and how to obtain relief assistance. *See* Note to 47 C.F.R. § 79.2(a)(2).

advanced technologies to bring more effective alerts and warnings to the public. We anticipate that this item will seek comment in some detail on how broadband technologies may make alerts more accessible to people with disabilities. The second, the Commission's implementation of the Twenty-First Century Communications and Video Accessibility Act, will seek to improve the accessibility of emergency information shown on video programming for persons with vision disabilities.[430] We believe that these efforts are the more appropriate vehicles for addressing long-term alert accessibility issues than the instant proceeding, which is primarily focused on the technical issues involved with revising the existing Part 11 rules to codify the Commission's CAP-related obligations related to the EAS. Nonetheless, we observe that alert access issues are within the scope of this proceeding, and at a minimum, it is appropriate to seek comment today on how the introduction of CAP into our EAS may enhance the accessibility of emergency alerts to people with disabilities.

191. Initially we note that the CSRIC working group that proposed revisions to Part 11 in light of CAP was not tasked with disabilities access issues *per se* and so did not recommend any specific Part 11 rule changes to accommodate persons with disabilities. However, the working group did acknowledge that access to alerts for persons with disabilities was a basic element of any effective alerting system and, citing recommendations developed by the National Center for Accessible Media at WGBH Access Alerts, the Telecommunications for the Deaf and Hard of Hearing, Inc. and others, recommended the following:

- As more people transition from traditional wire line phone systems and TTY usage to Internet-based technologies as their primary means of communication, it is important that these platforms continue to facilitate the delivery of emergency messages to citizens with disabilities. This could be achieved through the development of a national relay center, which disabled individuals could contact to learn more about a local event after receiving an initial alert through traditional channels. Such a center should be a source of information for the deaf and hard of hearing, the blind and visually impaired, caregivers in group homes, and people with physical disabilities; and
- Deployment of the CMAS at the local, state, tribal and Federal level using a CAP interface to the Federal Alert Aggregator in the CMAS architecture.[431]

192. Various other parties likewise have made suggestions concerning the need to improve the accessibility of EAS alerts for persons with disabilities. For example, the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) submitted comments in our EAS docket that stated that the Wireless RERC "is concerned that people who are hard of hearing or who are deaf are missing important visual information when they receive an EAS alert, because EAS participants are not required to present the audio portion of the EAS message visually."[432] Accordingly, Wireless RERC recommended that "the Commission amend 47 C.F.R. Part 11.51 to require EAS participants to transmit the portion of an EAS message as defined in paragraph 11.31(a)(3) both aurally and visually."[433] The Wireless RERC indicated that such requirement "would not be requisite immediately but it would be

[430] *See Twenty-first Century Communications and Video Accessibility Act of 2010* (CVAA), PL 111-260, § 202(a). This section replaces subsection 713(g) of the Communications Act, 47 U.S.C. §613(g), with a new requirement for the Commission to promulgate regulations requiring video programming providers and distributors and program owners to convey emergency information in a manner accessible to individuals who are blind or visually impaired.

[431] *CSRIC Final Report*, § 5.2. The CMAS uses an identifiable ring and vibration cadence to notify people that they have received an alert.

[432] Wireless RERC Comments, EB Docket 04-296 (filed May 17, 2010) at 1.

[433] *Id*. at 2.

included in the Next Generation EAS regulations for CAP."[434] The Wireless RERC added, however, that "if there is a considerable delay in implementing the Next Generation EAS or if there is a reason that an EAS participant cannot comply with the visual requirement in the Next Generation EAS regulations, it is recommended that the participant be required to install a speech to text capability or other means so that the audio message portion in an existing EAS message can be displayed visually."[435] As an alternative to installing speech-to-text capability, the Wireless RERC recommended that an EAS Participant be "permitted to access the Internet or other systems to obtain the text of the information provided in the audio portion of the EAS message."[436]

193. NCTA suggested that "EAS message originators should provide emergency alerts in both audio and visual format so that individuals with hearing and visual disabilities receive functionally equivalent information."[437]

194. At the outset, we note that questions concerning the Commercial Mobile Alert System (CMAS), or the evolution to Next Generation 9-1-1 for alerts, are outside the purview of this item, which is solely concerned with the EAS. Nevertheless, we acknowledge that there is a tension between our Part 11 rules, which only require limited visual information based upon certain EAS header codes,[438] and the section 79.2 emergency access provisions, which are designed to provide equal access to emergency information, whether provided via EAS or other video programming distribution method, to the entire public, including all persons with disabilities. Accordingly, at the outset we seek comment on whether there is in CAP some functionality that would allow EAS Participants to broadcast the same information in the visual portion (*i.e.*, the text crawl) of an EAS alert as is contained within the audio portion (if any).[439] We seek comment on appropriate revisions to the appropriate section(s) of Part 11.

195. We also seek comment on whether it is technically feasible for the existing EAS system or EAS Participant facilities to broadcast anything in lieu of an audio message. While CAP may have the versatility to convey both the audio and corresponding text elements of an alert message, we seek comment on whether the equipment that EAS Participants will be employing to receive CAP-based EAS alerts can simultaneously accommodate both an audio and textual message that can be delivered over the EAS. We also seek comment on whether intermediary devices designed to translate CAP to SAME[440] for current, pre-CAP EAS equipment will have the identical capability as "all-in-one" CAP EAS equipment in this regard. Further, although we believe that discussion of speech-to-text (as well as text-to-speech) software is best reserved for our Broadband Alerting Notice of Inquiry,[441] or other more appropriate

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[434] *Id*.

[435] *Id*.

[436] *Id*. at 3.

[437] National Cable & Telecommunications Association Comments, EB Docket 04-296 (filed May 17, 2010) at 5.

[438] *See* 47 C.F.R. § 11.51(d), (g)(3), (h)(3), (j)(2).

[439] We recognize that enhancing the visual information broadcast by EAS Participants would not address instances in which no audio portion is included for state and local (and NWS) messages, either because the EAS message originator did not provide one or because the EAS Participant elected not to broadcast it. *See* 47 C.F.R. § 11.51(b) (stating that EAS Participants are not required to provide the audio portion of state and local EAS messages).

[440] *See supra* note 30 and associated text for description of Specific Area Message Encoding (SAME) digital protocol.

[441] Various parties made suggestions concerning multilingual alerting over the EAS. *See, e.g.*, *CSRIC Final Report*, § 5.3; Sage Comments at 8; NCTA Comments at 5; NAB Comments at 8; NSBA Reply Comments at 6; Abbott-Gutierrez Reply Comments at 2; Minority Media and Telecommunications Council Reply Comments, EB Docket (continued….)

proceedings, we invite initial comment on the effectiveness of speech-to-text software and how EAS Participants might use it in a manner that neither delays nor inaccurately interprets an EAS alert message.

IV. PROCEDURAL MATTERS

A. *Ex Parte* Presentations

196. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[442] Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.[443] Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.

B. Comment Filing Procedures

197. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. **All filings related to this Third Further Notice of Proposed Rulemaking should refer to EB Docket No. 04-296**. Comments may be filed: (1) using the Commission's Electronic Comment Filing System (ECFS), (2) through the Federal Government's eRulemaking Portal, or (3) by filing paper copies. *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://www.fcc.gov/cgb/ecfs/ or the Federal eRulemaking Portal: http://www.regulations.gov. Filers should follow the instructions provided on the website for submitting comments.

  - For ECFS filers, if multiple docket or rulemaking numbers appear in the caption of this proceeding, filers must transmit one electronic copy of the comments for each docket or rulemaking number referenced in the caption. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.

  - Paper Filers: Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-

(Continued from previous page)
04-296 (filed June 14, 2010) at 3. This issue, along with the issue of ensuring access to EAS by people with disabilities, was raised in the *Next Generation EAS FNPRM*, which remains an open proceeding. *See Next Generation EAS FNPRM*, 22 FCC Rcd 13275, 13306-07, paras. 72-73. We find both issues to be more appropriate for the Notice of Inquiry on Broadband Alerting, and we expect to take up both of these issues in that item.

[442] 47 C.F.R. §§ 1.200 *et seq*.

[443] *See* 47 C.F.R. § 1.1206(b)(2).

class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- Effective December 28, 2009, all hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building. **PLEASE NOTE**: The Commission's former filing location at 236 Massachusetts Avenue, NE is permanently closed.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.

- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12th Street, SW, Washington DC 20554.

C. Accessible Formats

198. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

D. Regulatory Flexibility Analysis

199. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix B. Written public comments are requested on the IRFA. These comments are subject to the same procedures and filing deadlines as comments filed in response to this Third Further Notice of Proposed Rulemaking as set forth in paragraph 195 and must have a separate and distinct heading designating them as responses to the IRFA.

E. Paperwork Reduction Act Analysis

200. This document contains proposed or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

V. ORDERING CLAUSES

201. Accordingly, IT IS ORDERED that pursuant to sections 1, 2, 4(i), 4(o), 301, 303(r), 303(v), 307, 309, 335, 403, 624(g),706, and 715 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i) and (o), 301, 303(r), 303(v), 307, 309, 335, 403, 544(g), 606, and 615, this Third Further Notice of Proposed Rulemaking IS ADOPTED.

202. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Third Further Notice of

Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

203. IT IS FURTHER ORDERED that pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on this Third Further Notice of Proposed Rulemaking on or before 30 days after publication in the Federal Register, and interested parties may file reply comments on or before 45 days after publication in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Proposed Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 C.F.R. Part 11 to read as follows:

PART 11 – EMERGENCY ALERT SYSTEM (EAS)

1. The authority citation for Part 11 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154 (i) and (o), 303(r), 544(g) and 606.

2. Amend Section 11.2 of Part 11 of Title 47 of the Code of Federal Regulations by adding new paragraphs (a) and (i), revising and re-designating paragraphs (a) and (b), and re-designating paragraphs (c) through (g), as follows:

§ 11.2 Definitions.

The definitions of terms used in part 11 are:

(a) Emergency Action Notification (EAN). The Emergency Action Notification is the notice to all EAS Participants and to the general public that the EAS has been activated for a national emergency.

(b) Primary Entry Point (PEP) System. The PEP system is a nationwide network of broadcast stations and other entities connected with government activation points. It is used to distribute EAS messages that are formatted in the EAS Protocol (specified in §11.31), including the EAN and EAS national test messages. FEMA has designated some of the nation's largest radio broadcast stations as PEPs. The PEPs are designated to receive the Presidential alert from FEMA and distribute it to local stations.

(c) Local Primary One (LP-1). The LP-1 is a radio or TV station that acts as a key EAS monitoring source. Each LP-1 station must monitor its regional PEP station and a back-up source for Presidential messages.

(d) EAS Participants. Entities required under the Commission's rules to comply with EAS rules, e.g., analog radio and television stations, and wired and wireless cable television systems, DBS, DTV, SDARS, digital cable and DAB, and wireline video systems.

(e) Wireline Video System. The system of a wireline common carrier used to provide video programming service.

(f) Participating National (PN). PN stations are broadcast stations that transmit EAS National, state, or local EAS messages to the public.

(g) National Primary (NP). Stations that are the primary entry point for Presidential messages delivered by FEMA. These stations are responsible for broadcasting a Presidential alert to the public and to State Primary stations within their broadcast range.

(h) State Primary (SP). Stations that are the entry point for State messages, which can originate from the Governor or a designated representative.

(i) Intermediary Device. An intermediary device is stand-alone equipment that acquires and decodes EAS messages formatted in the Common Alerting Protocol (CAP) in accordance with §11.56, converts such CAP-formatted message into an EAS message (or data stream) that complies with the EAS Protocol (set forth in §11.31), and inputs such EAS Protocol-compliant message (or data stream) into a separate EAS decoder, EAS encoder, or unit combining such decoder and encoder functions, for further processing in accordance with the EAS message processing rules in this Part.

3. Amend Section 11.11 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraphs (a) and (d) as follows:

§ 11.11 The Emergency Alert System (EAS).

(a) The EAS is composed of analog radio broadcast stations including AM, FM, and Low-power FM (LPFM) stations; digital audio broadcasting (DAB) stations, including digital AM, FM, and Low-power FM stations; Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of this part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireline video systems; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in §25.701(a) of this chapter (including certain Ku-band Fixed-Satellite Service Direct to Home providers); SDARS, as defined in §25.201 of this chapter; participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels. These entities are referred to collectively as EAS Participants in this part, and are subject to this part, except as otherwise provided herein. At a minimum EAS Participants must use a common EAS protocol, as defined in §11.31, to send and receive emergency alerts, and comply with the requirements set forth in §11.56, in accordance with the following tables:

Table 1: Analog and Digital Broadcast Station Equipment Deployment Requirements

EAS equipment requirement	AM & FM	Digital AM & FM	Analog & Digital FM Class D	Analog & Digital LPFM	DTV	Analog & Digital Class A TV	Analog & Digital LPTV
EAS decoder[1]	Y	Y	Y	Y	Y	Y	Y
EAS encoder	Y	Y	N	N	Y	Y	N
Audio message	Y	Y	Y	Y	Y	Y	Y
Video message	N/A	N/A	N/A	N/A	Y	Y	Y

[1] EAS Participants may comply with the obligations set forth in section 11.56 of this Part to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device.

Analog Cable Systems

Analog cable systems are subject to the requirements in Table 2 below. Analog cable systems serving fewer than 5,000 subscribers from a headend may either provide the National level EAS message on all programmed channels including the required testing, or comply with the requirements in Table 2.

Table 2: Analog Cable System Equipment Deployment Requirements

EAS equipment requirement	≥5,000 subscribers	<5,000 subscribers
EAS decoder[1]	Y	Y
EAS encoder	Y	Y[2]
Audio and Video EAS Message on all channels	Y	N
Video interrupt and audio alert message on all channels;[3] Audio and Video EAS message on at least one channel	N	Y

[1] EAS Participants may comply with the obligations set forth in section 11.56 of this Part to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device.

[2] Analog cable systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

[3] The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message. [Note: Programmed channels do not include channels used for the transmission of data such as interactive games.]

Wireless Cable Systems (BRS/EBS Stations)

Wireless cable systems are subject to the requirements in Table 3 below. Wireless cable systems serving fewer than 5,000 subscribers from a single transmission site must either provide the National level EAS message on all programmed channels including the required testing, or comply with the requirements in Table 3.

Table 3: Wireless Cable System Equipment Deployment Requirements

EAS equipment requirement	≥5,000 subscribers	<5,000 subscribers
EAS decoder[1]	Y	Y
EAS encoder	Y	Y[2]
Audio and Video EAS Message on all channels[3]	Y	N
Video interrupt and audio alert message on all channels;[4] Audio and Video EAS message on at least one channel	N	Y

[1] EAS Participants may comply with the obligations set forth in section 11.56 of this Part to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device.

[2] Wireless cable systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

[3] All wireless cable systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages.

[4] The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message. [Note: Programmed channels do not include channels used for the transmission of data services such as Internet.]

Digital Cable Systems and Wireline Video Systems

Digital cable systems and Wireline Video Systems must comply with the requirements in Table 4 below. Digital cable systems and Wireline Video Systems serving fewer than 5,000 subscribers from a headend must either provide the National level EAS message on all programmed channels including the required testing, or comply with the requirements in Table 4.

Table 4: Digital Cable System and Wireline Video System Equipment Deployment Requirements

EAS equipment requirement	≥5,000 subscribers	<5,000 subscribers
EAS decoder[1]	Y	Y
EAS encoder	Y	Y[2]
Audio and Video EAS Message on all channels[3]	Y	N
Video interrupt and audio alert message on all channels;[4] Audio and Video EAS message on at least one channel	N	Y

[1] EAS Participants may comply with the obligations set forth in section 11.56 of this Part to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device.

[2] Digital cable systems and wireline video systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

[3] All digital cable systems and wireline video systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages.

[4] The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message. [Note: Programmed channels do not include channels used for the transmission of data services such as Internet.]

SDARS and DBS

EAS equipment requirement	SDARS	DBS

EAS decoder[1]	Y	Y
EAS encoder	Y	Y
Audio message on all channels[2]	Y	Y
Video message on all channels[2]	N/A	Y

[1] EAS Participants may comply with the obligations set forth in section 11.56 of this Part to decode and convert CAP-formatted messages into EAS Protocol-compliant messages by deploying an Intermediary Device.

[2] All SDARS and DBS providers may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages or by any other method that ensures that viewers of all channels receive the EAS message.

* * * * *

(d) Local franchise authorities may use any EAS codes authorized by the FCC in any agreements.

* * * * *

4. Delete Section 11.12 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.12 Two-tone Attention Signal encoder and decoder.

[deleted]

5. Delete Section 11.13 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.13 Emergency Action Notification (EAN) and Emergency Action Termination (EAT).

[deleted]

6. Delete Section 11.14 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.14 Primary Entry Point (PEP) System.

[deleted]

7. Delete Section 11.15 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.15 EAS Operating Handbook.

[deleted]

8. Delete Section 11.16 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.16 National Control Point Procedures.

[deleted]

9. Amend Section 11.21 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraphs (a) and (b) as follows:

§ 11.21 State and Local Area Plans and FCC Mapbook.

* * * * *

(a) The State Area EAS Plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit emergency information to the public during a State emergency using the EAS. State Area EAS Plans should include a data table, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for the emergency action notification ("EAN") from the PEP to each station in the plan. The State Area EAS Plan also must include specific and detailed information describing how statewide and geographically-targeted EAS messages formatted in the Common Alerting Protocol (CAP) that are aggregated and delivered by the Governor (or his/her designee, or by FEMA on behalf of such Governor), as specified in §11.55(a), will be transmitted to all EAS Participants who provide services in the state, and must identify the Really Simple Syndication, version 2.0, feed(s) that will be utilized to distribute such CAP-formatted EAS messages for purposes of the monitoring obligations set forth in §11.52(d)(ii). EAS Participants must maintain within the facility wherein EAS equipment is located, and if remotely operated, the facility from which such equipment is remotely operated, a copy of the most recent FCC-approved State Area EAS Plan for the state in which such facility is located, such that it is immediately available to staff responsible for initiating actions.

(b) The Local Area EAS Plan contains procedures for local officials or the NWS to transmit emergency information to the public during a local emergency using the EAS. Local Area EAS Plans may be a part of the State Area EAS Plan. A Local Area is a geographical area of contiguous communities or counties that may include more than one state. EAS Participants must maintain within the facility wherein EAS equipment is located, and if remotely operated, the facility from which such equipment is remotely operated, a copy of the most recent FCC-approved Local Area EAS Plan for Local Areas in which such facility is located, unless such Local Area EAS Plan is part of a State Area EAS Plan already being maintained at such facility, such that it is immediately available to staff responsible for initiating actions.

* * * * *

10. Amend Section 11.31 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraphs (c), (e) and (f) as follows:

§ 11.31 EAS protocol.

* * * * *

(c) The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization. The EAS protocol and message format are specified in the following representation.

Examples are provided in FCC Public Notices.

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(at least a one second pause)

(transmission of 8 to 25 seconds of Attention Signal)

(transmission of audio, video or text messages)

(at least a one second pause)

[PREAMBLE]NNNN (one second pause)

[PREAMBLE]NNNN (one second pause)

[PREAMBLE]NNNN (at least one second pause)

[PREAMBLE] This is a consecutive string of bits (sixteen bytes of AB hexadecimal [8 bit byte 10101011]) sent to clear the system, set AGC and set asynchronous decoder clocking cycles. The preamble must be transmitted before each header and End of Message code.

ZCZC--This is the identifier, sent as ASCII characters ZCZC to indicate the start of ASCII code.

ORG--This is the Originator code and indicates who originally initiated the activation of the EAS. These codes are specified in paragraph (d) of this section.

EEE--This is the Event code and indicates the nature of the EAS activation. The codes are specified in paragraph (e) of this section. The Event codes must be compatible with the codes used by the NWS Weather Radio Specific Area Message Encoder (WRSAME).

PSSCCC--This is the Location code and indicates the geographic area affected by the EAS alert. There may be 31 Location codes in an EAS alert. The Location code uses the codes described in the American National Standards Institute (ANSI) standard, ANSI INCITS 31-2009 ("Information technology - Codes for the Identification of Counties and Equivalent Areas of the United States, Puerto Rico, and the Insular Areas"). Each state is assigned an SS number as specified in paragraph (f) of this section. Each county and some cities are assigned a CCC number. A CCC number of 000 refers to an entire State or Territory. P defines county subdivisions as follows: 0 = all or an unspecified portion of a county, 1 = Northwest, 2 = North, 3 = Northeast, 4 = West, 5 = Central, 6 = East, 7 = Southwest, 8 = South, 9 = Southeast. Other numbers may be designated later for special applications. The use of county subdivisions will probably be rare and generally for oddly shaped or unusually large counties. Any subdivisions must be defined and agreed to by the local officials prior to use.

+TTTT--This indicates the valid time period of a message in 15 minute segments up to one hour and then in 30 minute segments beyond one hour; i.e., +0015, +0030, +0045, +0100, +0430 and +0600.

JJJHHMM--This is the day in Julian Calendar days (JJJ) of the year and the time in hours and minutes (HHMM) when the message was initially released by the originator using 24 hour Universal Coordinated Time (UTC).

LLLLLLLL--This is the identification of the EAS Participant, NWS office, etc., transmitting or retransmitting the message. These codes will be automatically affixed to all outgoing messages by the EAS encoder.

NNNN--This is the End of Message (EOM) code sent as a string of four ASCII N characters.

* * * * *

(e) The following Event (EEE) codes are presently authorized:

Nature of Activation	Event Codes
National Codes (Required):	
Emergency Action Notification (National only)	EAN
National Information Center	NIC
National Periodic Test	NPT
Required Monthly Test	RMT
Required Weekly Test	RWT
State and Local Codes (Optional):	
Administrative Message	ADR
Avalanche Warning	AVW[1]
Avalanche Watch	AVA[1]
Blizzard Warning	BZW
Child Abduction Emergency	CAE[1]
Civil Danger Warning	CDW[1]
Civil Emergency Message	CEM
Coastal Flood Warning	CFW[1]
Coastal Flood Watch	CFA[1]
Dust Storm Warning	DSW[1]
Earthquake Warning	EQW[1]
Evacuation Immediate	EVI
Fire Warning	FRW[1]
Flash Flood Warning	FFW
Flash Flood Watch	FFA
Flash Flood Statement	FFS
Flood Warning	FLW
Flood Watch	FLA
Flood Statement	FLS
Hazardous Materials Warning	HMW[1]
High Wind Warning	HWW
High Wind Watch	HWA
Hurricane Warning	HUW
Hurricane Watch	HUA
Hurricane Statement	HLS
Law Enforcement Warning	LEW[1]
Local Area Emergency	LAE[1]
Network Message Notification	NMN[1]
911 Telephone Outage Emergency	TOE[1]
Nuclear Power Plant Warning	NUW[1]
Practice/Demo Warning	DMO
Radiological Hazard Warning	RHW[1]
Severe Thunderstorm Warning	SVR
Severe Thunderstorm Watch	SVA
Severe Weather Statement	SVS
Shelter in Place Warning	SPW[1]

Special Marine Warning	SMW[1]
Special Weather Statement	SPS
Tornado Warning	TOR
Tornado Watch	TOA
Tropical Storm Warning	TRW[1]
Tropical Storm Watch	TRA[1]
Tsunami Warning	TSW
Tsunami Watch	TSA
Volcano Warning	VOW[1]
Winter Storm Warning	WSW
Winter Storm Watch	WSA

[1] Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their existing EAS equipment to add these event codes on a voluntary basis until the equipment is replaced. All models of EAS equipment manufactured after August 1, 2003 must be capable of receiving and transmitting these event codes. EAS Participants that install or replace their EAS equipment after February 1, 2004 must install equipment that is capable of receiving and transmitting these event codes.

(f) The State, Territory and Offshore (Marine Area) ANSI number codes (SS) are as follows. County ANSI numbers (CCC) are contained in the State EAS Mapbook.

	ANSI#
State:	
AL	01
AK	02
AZ	04
AR	05
CA	06
CO	08
CT	09
DE	10
DC	11
FL	12
GA	13
HI	15
ID	16
IL	17
IN	18
IA	19
KS	20
KY	21
LA	22
ME	23
MD	24
MA	25
MI	26
MN	27
MS	28
MO	29
MT	30
NE	31
NV	32
NH	33
NJ	34
NM	35
NY	36

NC	37
ND	38
OH	39
OK	40
OR	41
PA	42
RI	44
SC	45
SD	46
TN	47
TX	48
UT	49
VT	50
VA	51
WA	53
WV	54
WI	55
WY	56
Terr.:	
AS	60
FM	64
GU	66
MH	68
MH	68
PR	72
PW	70
UM	74
	78
Offshore (Marine Areas)[1]:	
Eastern North Pacific Ocean, and along U.S. West Coast from Canadian border to Mexican border	57
North Pacific Ocean near Alaska, and along Alaska coastline, including the Bering Sea and the Gulf of Alaska	58
Central Pacific Ocean, including Hawaiian waters	59
South Central Pacific Ocean, including American Samoa waters	61
Western Pacific Ocean, including Mariana Island waters	65
Western North Atlantic Ocean, and along U.S. East Coast, from Canadian border south to Currituck Beach Light, N.C	73
Western North Atlantic Ocean, and along U.S. East Coast, south of Currituck Beach Light, N.C., following the coastline into Gulf of Mexico to Bonita Beach, FL., including the Caribbean	75
Gulf of Mexico, and along the U.S. Gulf Coast from the Mexican border to Bonita Beach, FL	77
Lake Superior	91

Lake Michigan	92
Lake Huron	93
Lake St. Clair	94
Lake Erie	96
Lake Ontario	97
St. Lawrence River above St. Regis	98

[1] Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their existing EAS equipment to add these marine area location codes on a voluntary basis until the equipment is replaced. All models of EAS equipment manufactured after August 1, 2003, must be capable of receiving and transmitting these marine area location codes. EAS Participants that install or replace their EAS equipment after February 1, 2004, must install equipment that is capable of receiving and transmitting these location codes.

11. Amend Section 11.32 of Part 11 of Title 47 of the Code of Federal Regulations by deleting paragraph (a)(9) as follows:

§ 11.32 EAS Encoder.

(a) EAS Encoders must at a minimum be capable of encoding the EAS protocol described in §11.31 and providing the EAS code transmission requirements described in §11.51. EAS encoders must additionally provide the following minimum specifications:

(1) * * * * *

(2) * * * * *

(3) * * * * *

(4) * * * * *

(5) * * * * *

(6) * * * * *

(7) * * * * *

(8) * * * * *

(9) [deleted]

* * * * *

12. Amend Section 11.33 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraph (a), deleting paragraph (b), and re-designating paragraph (c), as follows:

§ 11.33 EAS Decoder.

(a) An EAS Decoder must at a minimum be capable of (i) providing the EAS monitoring functions described in §11.52, (ii) decoding EAS messages formatted in accordance with the EAS Protocol described §11.31, and (iii) converting Common Alerting Protocol (CAP)-formatted EAS messages into EAS alert messages that comply with the EAS Protocol, in accordance with §11.56(a)(ii), with the

exception that the CAP-related monitoring and conversion requirements set forth in §§11.52(d)(ii) and 11.56(a)(ii) can be satisfied via an Intermediary Device. An EAS Decoder also must be capable of the following minimum specifications:

* * * * *

(b) Decoders shall be capable of operation within the tolerances specified in this section as well as those in §11.32(b), (c) and (d).

13. Amend Section 11.41 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraph (c) as follows:

§ 11.41 Participation in EAS.

* * * * *

(c) All EAS Participants, including NN sources, must maintain within their facilities a copy of the current, FCC-filed and approved versions of the State and Local Area EAS Plans (unless the Local Area EAS Plan is part of the State Area EAS Plan), as set forth in §11.21(a) and (b).

14. Delete Section 11.42 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.42 Participation by communications common carriers.

[deleted]

15. Delete Section 11.44 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.44 EAS message priorities.

[deleted]

16. Amend Section 11.51 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraphs (a), (c), (d), (i), (j) and (m) as follows:

§ 11.51 EAS code and Attention Signal Transmission requirements.

(a) Analog and digital broadcast stations must transmit, either automatically or manually, national level EAS messages and required tests by sending the EAS header codes, Attention Signal, emergency message and End of Message (EOM) codes using the EAS Protocol. The Attention Signal must precede any emergency audio message.

* * * * *

(c) All analog and digital radio and television stations shall transmit EAS messages in the main audio channel. All DAB stations shall also transmit EAS messages on all audio streams. All DTV broadcast stations shall also transmit EAS messages on all program streams.

(d) Analog and digital television broadcast stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. If the message is a video crawl,

it shall be displayed at the top of the television screen or where it will not interfere with other visual messages.

* * * * *

(i) SDARS licensees shall transmit national audio EAS messages on all channels in the same order specified in paragraph (a) of this section.

(1) SDARS licensees must install, operate, and maintain equipment capable of generating the EAS codes.

(2) SDARS licensees may determine the distribution methods they will use to comply with this requirement.

(j) DBS providers shall transmit national audio and visual EAS messages on all channels in the same order specified in paragraph (a) of this section.

(1) DBS providers must install, operate, and maintain equipment capable of generating the EAS codes.

(2) The visual message shall contain the Originator, Event, Location and the valid time period of the EAS message. These are elements of the EAS header code and are described in §11.31. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

(3) DBS providers may determine the distribution methods they will use to comply with this requirement. Such methods may include distributing the EAS message on all channels, using a means to automatically tune the subscriber's set-top box to a pre-designated channel which carries the required audio and video EAS messages, and/or passing through the EAS message provided by programmers and/or local channels (where applicable).

* * * * *

(m) EAS Participants are required to transmit all received EAS messages in which the header code contains the Event codes for Emergency Action Notification (EAN) and Required Monthly Test (RMT), and when the accompanying location codes include their State or State/county. These EAS messages shall be retransmitted unchanged except for the LLLLLLLL-code which identifies the EAS Participant retransmitting the message. See §11.31(c). If an EAS source originates an EAS message with the Event codes in this paragraph, it must include the location codes for the State and counties in its service area. When transmitting the required weekly test, EAS Participants shall use the event code RWT. The location codes are the state and county for the broadcast station city of license or system community or city. Other location codes may be included upon approval of station or system management. EAS messages may be transmitted automatically or manually.

* * * * *

17. Amend Section 11.52 of Part 11 of Title 47 of the Code of Federal Regulations by deleting the Note to paragraph (a) and revising paragraphs (a), (d) and (e) as follows:

§ 11.52 EAS code and Attention Signal Monitoring requirements.

(a) EAS Participants must be capable of receiving the Attention Signal required by §11.32(a)(9) and emergency messages of other broadcast stations during their hours of operation. EAS Participants must install and operate during their hours of operation, equipment that is capable of receiving and decoding, either automatically or manually, the EAS header codes, emergency messages and EOM code, and which complies with the requirements in §11.56.

[NOTE TO PARAGRAPH (A) is deleted]

* * * * *

(d) EAS Participants must comply with the following monitoring requirements:

(i) With respect to monitoring for EAS messages that are formatted in accordance with the EAS Protocol, EAS Participants must monitor two EAS sources. The monitoring assignments of each broadcast station and cable system and wireless cable system are specified in the State Area EAS Plan and FCC Mapbook. They are developed in accordance with FCC monitoring priorities.

(ii) With respect to monitoring EAS messages formatted in accordance with the specifications set forth in §11.56(a)(ii), EAS Participants must monitor the Really Simple Syndication, version 2.0, feed(s):

(a) utilized by the Federal Emergency Management Agency's (FEMA) Integrated Public Alert and Warning System for distribution of federal Common Alert Protocol (CAP)-formatted alert messages to the EAS; and

(b) identified in a State Area EAS Plan as the source for distributing governor-originated CAP-formatted alert messages to the EAS, provided that such State Area EAS Plan complies fully with §11.21(a) and has been reviewed and approved by the Chief, Public Safety and Homeland Security Bureau, prior to implementation, as required by §11.21.

(iii) If the required EAS message sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the Chief, Public Safety and Homeland Security Bureau. In an emergency, a waiver may be issued over the telephone with a follow up letter to confirm temporary or permanent reassignment.

(iv) The management of EAS Participants shall determine which header codes will automatically interrupt their programming for State and Local Area emergency situations affecting their audiences.

(e) EAS Participants are required to interrupt normal programming either automatically or manually when they receive an EAS message in which the header code contains the Event codes for Emergency Action Notification (EAN) or the Required Monthly Test (RMT) for their State or State/county location.

(1) * * * * *

(2) Manual interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN Event code must be transmitted immediately and Monthly EAS test messages within 60 minutes. All actions must be logged and recorded as specified in §§11.35(a) and 11.54(a)(3). Decoders must be programmed for the EAN Event header code and the RMT and RWT Event header codes (for

required monthly and weekly tests), with the appropriate accompanying State and State/county location codes.

18. Amend Section 11.54 of Part 11 of Title 47 of the Code of Federal Regulations by deleting paragraphs (a), (b)(1)-(8), (b)(10), (b)(12) and (c), and revising and re-designating paragraphs (b), (b)(9), (b)(11), (b)(13), (d) and (e), as follows:

§ 11.54 EAS operation during a National Level emergency.

(a) Immediately upon receipt of an EAN message, EAS Participants must comply with the following requirements, as applicable:

(1) Analog and digital broadcast stations may transmit their call letters and analog cable systems, digital cable systems and wireless cable systems may transmit the names of the communities they serve during an EAS activation. State and Local Area identifications must be given as provided in State and Local Area EAS Plans.

(2) Analog and digital broadcast stations, except those holding an EAS Non-participating National Authorization letter, are exempt from complying with §§73.62 and 73.1560 of this chapter (operating power maintenance) while operating under this part.

(3) The time of receipt of the EAN shall be entered by analog and digital broadcast stations in their logs (as specified in §§73.1820 and 73.1840 of this chapter), by analog and digital cable systems in their records (as specified in §76.1711 of this chapter), by subject wireless cable systems in their records (as specified in §21.304 of this chapter), and by all other EAS Participants in their records as specified in §11.35(a).

(b) EAS Participants originating emergency communications under this section shall be considered to have conferred rebroadcast authority, as required by section 325(a) of the Communications Act of 1934, 47 U.S.C. 325(a), to other EAS Participants.

(c) During a national level EAS emergency, EAS Participants may transmit in lieu of the EAS audio feed an audio feed of the President's voice message from an alternative source, such as a broadcast network audio feed.

19. Amend Section 11.55 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraphs (a) and (c) as follows:

§ 11.55 EAS operation during a State or Local Area emergency.

(a) Effective [December 30, 2011], all EAS Participants (excepting SDARs and DBS providers) must deploy equipment that is capable of:

(i) Acquiring, in accordance with the State EAS alert message monitoring requirements in §11.52(d)(ii), statewide and geographically-targeted (as defined by the Location code provisions in §11.31) EAS alert messages that are formatted pursuant to the Organization for the Advancement of Structured Information Standards (OASIS) specifications (1) OASIS Common Alerting Protocol Version 1.2 (July 1, 2010), and (2) Common Alerting Protocol, v. 1.2 USA Integrated Public Alert and Warning System Profile Version 1.0 (Oct. 13, 2009), as aggregated and delivered by the Governor, or his/her designee, or by FEMA on behalf of such Governor, of a state in which the EAS Participant is located;

(ii) Converting such EAS alert messages into EAS alert messages that comply with the EAS Protocol, such that the Preamble and EAS Header Codes, audio Attention Signal, audio message, and Preamble and EAS End of Message (EOM) Codes of such messages are rendered equivalent to the EAS Protocol (set forth in §11.31), in accordance with the technical specifications governing such conversion process set forth in the ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0 (May 17, 2010), developed and published by the EAS-CAP Industry Group; and

(iii) Processing such converted messages in accordance with the other sections of this Part.

This obligation does not apply unless and until a State Area EAS Plan detailing the delivery of such State Governor-initiated CAP-formatted messages has been submitted to and approved by the Chief, Public Safety and Homeland Security Bureau, in accordance with §11.21. EAS Participants may but are not required to process CAP-formatted EAS messages aggregated and delivered by the Sate Governor (or his/her designee, or FEMA) that do not conform to the specifications identified herein for CAP messages and their translation into the EAS Protocol. Examples of natural emergencies which may warrant state EAS activation are: Tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies warranting state EAS activation may include: toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.

(1) * * * * *

(2) * * * * *

* * * * *

(c) Immediately upon receipt of a State or Local Area EAS message that has been formatted in the EAS Protocol, EAS Participants participating in the State or Local Area EAS must do the following:

(1) * * * * *

(2) * * * * *

(3) * * * * *

(4) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area Plans. Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in §11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, and wireless cable systems must transmit all EAS announcements visually and aurally as specified in §11.51(g) and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in §11.51(j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.

* * * * *

20. Re-title and revise Section 11.56 of Part 11 of Title 47 of the Code of Federal Regulations as follows:

§ 11.56 Obligation to Process CAP-Formatted EAS Messages.

(a) On or by [September 30, 2011], EAS Participants must have deployed operational equipment that is capable of the following:

(i) Acquiring EAS alert messages in accordance with the monitoring requirements in §11.52(d)(ii);

(ii) Converting EAS alert messages that have been formatted pursuant to the Organization for the Advancement of Structured Information Standards (OASIS) specifications (1) OASIS Common Alerting Protocol Version 1.2 (July 1, 2010), and (2) Common Alerting Protocol, v. 1.2 USA Integrated Public Alert and Warning System Profile Version 1.0 (Oct. 13, 2009), into EAS alert messages that comply with the EAS Protocol, such that the Preamble and EAS Header Codes, audio Attention Signal, audio message, and Preamble and EAS End of Message (EOM) Codes of such messages are rendered equivalent to the EAS Protocol (set forth in §11.31), in accordance with the technical specifications governing such conversion process set forth in the ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0 (May 17, 2010), developed and published by the EAS-CAP Industry Group; and

(iii) Processing such converted messages in accordance with the other sections of this Part.

(b) EAS Participants may comply with the requirements of this section by deploying an Intermediary Device that acquires the CAP-formatted message, converts it into an EAS Protocol-compliant message, and inputs such EAS Protocol-compliant message into a separate EAS decoder, EAS encoder, or unit combining such decoder and encoder functions, for further processing in accordance with the other sections of this Part.

21. Amend Section 11.61 of Part 11 of Title 47 of the Code of Federal Regulations by revising paragraphs (a), (a)(1)(i), (a)(2)(ii) and (b) as follows:

§ 11.61 Tests of EAS procedures.

(a) EAS Participants shall conduct tests at regular intervals, as specified in paragraphs (a)(1) and (a)(2) of this section. Additional tests may be performed anytime. EAS activations and special tests may be performed in lieu of required tests as specified in paragraph (a)(4) of this section.

(1) Required Monthly Tests of the EAS header codes, Attention Signal, Test Script and EOM code.

(i) Tests in odd numbered months shall occur between 8:30 a.m. and local sunset. Tests in even numbered months shall occur between local sunset and 8:30 a.m. They will originate from Local or State Primary sources. The time and script content will be developed by State Emergency Communications Committees in cooperation with affected EAS Participants. Script content may be in the primary language of the EAS Participant. These monthly tests must be transmitted within 60 minutes of receipt by EAS Participants in an EAS Local Area or State. Analog and digital class D non-commercial educational FM, analog and digital LPFM stations, and analog and digital LPTV stations are required to transmit only the test script.

(ii) * * * * *

(2) Required Weekly Tests:

(i) * * * * *

(ii) DBS providers, analog and digital class D non-commercial educational FM stations, analog and digital LPFM stations, and analog and digital LPTV stations are not required to transmit this test but must log receipt, as specified in §11.35(a) and 11.54(a)(3).

(iii) * * * * *

(iv) * * * * *

* * * * *

(b) Entries shall be made in EAS Participant records, as specified in §11.35(a) and 11.54(a)(3).

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the policies and rules proposed in this Third Further Notice of Proposed Rulemaking (*Third Further Notice*). We request written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Third Further Notice* provided in section IV of the item. The Commission will send a copy of the *Third Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2] In addition, the *Third Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[3]

A. Need for, and Objectives of, the Proposed Rules

2. In 2007, as an initial step towards upgrading the Emergency Alert System (EAS) to incorporate the latest technologies and capabilities and to facilitate integration of public alerting at the national, state, and local levels, the Commission adopted the *Second Report and Order* in this docket, which incorporated certain Common Alerting Protocol (CAP)-related obligations into the Commission's Part 11 EAS rules.[4] First, to ensure the efficient, rapid, and secure transmission of EAS alerts in a variety of formats (including text, audio, and video) and via different means (broadcast, cable, satellite, and other networks), the Commission required that EAS Participants be capable of receiving CAP-formatted alert messages no later than 180 days after the Federal Emergency Management Agency (FEMA) publicly publishes its adoption of the CAP standard.[5] Second, the Commission required EAS Participants to adopt Next Generation EAS delivery systems no later than 180 days after FEMA publicly releases standards for those systems.[6] Third, the Commission required EAS Participants to transmit state and local EAS alerts that are originated by governors or their designees no later than 180 days after FEMA publishes its adoption of the CAP standard, provided that the state has a Commission-approved State Area EAS Plan that provides for delivery of such alerts.[7]

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[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2] *See* 5 U.S.C. § 603(a).

[3] *Id.*

[4] *See* Review of the Emergency Alert System; Independent Spanish Broadcasters Association, The Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council, Petition for Immediate Relief, *Second Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 13275 (2007) (alternatively, "*Second Report and Order*").

[5] *See Second Report and Order*, 22 FCC Rcd 13275, 13288, para. 26; *codified at* 47 C.F.R. § 11.56. On November 18, 2010, the Commission adopted the *Waiver Order*, which extended the 180-day deadline for EAS Participants to meet the CAP-related obligations e adopted in the *Second Report and Order* until September 30, 2011. *See* Review of the Emergency Alert System, Order, EB Docket No. 04-296, FCC 10-191 (rel. Nov. 23, 2010) at para. 1 (*Waiver Order*).

[6] *See id*. at 22 FCC Rcd 13291, para. 32.

[7] *See id.* at 13300, para. 55; *codified at* 47 C.F.R. § 11.55.

3. This *Third Further Notice* builds on that effort by seeking comment on a wide range of tentative conclusions and proposed revisions to the Part 11 rules that would codify the CAP-related mandates adopted in the *Second Report and Order*, and modernize and streamline the Part 11 rules by eliminating outdated technical and procedural requirements. Specifically, this *Third Further Notice* contains the following tentative conclusions and proposed rule changes, and seeks comment on each:

- Tentatively concludes that, for the time being, the existing legacy EAS, including utilization of the EAS Protocol, will be maintained.
- Proposes to amend section 11.56 to require EAS Participants to convert CAP-formatted EAS messages into SAME-compliant EAS messages in accordance with the EAS-CAP Industry Group's (ECIG) ECIG Implementation Guide.[8]
- Tentatively concludes that section 11.52 should be amended to require that EAS Participants monitor the Really Simple Syndication 2.0 feed(s) utilized by: (i) FEMA's Integrated Public Alert and Warning System for federal CAP-formatted messages; and (ii) state alert systems as the source of governor-originated CAP messages (provided these are described in the State Area EAS Plan submitted to and approved by the Commission).
- Proposes that the language from the *Second Report and Order* regarding receipt of CAP-formatted messages from Next Generation EAS delivery systems[9] was intended to put EAS Participants on notice that, should FEMA adopt technical standards covering delivery of CAP-formatted messages to EAS Participants over specific platforms, such as satellite systems, EAS Participants would ultimately need to configure their systems to be able to interface with such systems to meet their existing obligation to process CAP-formatted messages.
- Seeks comment on whether EAS Participants should be permitted to meet their CAP-related obligations by deploying intermediary devices that essentially would carry out the function of receiving and decoding a CAP-formatted message, and translating and encoding such message into a SAME-formatted message that could then be inputted into a legacy EAS device via its audio port (just as an over-the-air SAME-formatted message would be) for broadcast over the EAS Participant's transmission platform.
- Seeks comment on whether adding a requirement to section 11.32(a) that EAS encoders must be capable of encoding a CAP-formatted message (*i.e.*, originating or somehow transmitting a message in the CAP format as opposed to the SAME format) would be necessary or appropriate.
- Seeks comment on whether the input and output configuration requirements in sections 11.32(a)(2) and (a)(3) should be modified to include a requirement for a single Ethernet port and eliminate the existing requirements for 1200 baud RS-232C interface.

[8] *See* ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0 (May 17, 2010), EB Docket 04-296 (filed May 17, 2010) (the "ECIG Implementation Guide") (this document is also available on ECIG's web site at: http://eas-cap.org/documents.htm).

[9] *See Second Report and Order*, 22 FCC Rcd 13275, 13291, para. 32 ("should FEMA announce technical standards for any Next Generation EAS alert delivery system, EAS Participants must configure their networks to receive CAP-formatted alerts delivered pursuant to such delivery system, whether wireline, Internet, satellite or other, within 180 days after the date that FEMA announces the technical standards for such Next Generation EAS alert delivery.").

- Seeks comment on whether the minimum requirements for decoders in section 11.33(a) should include the capability to decode CAP-formatted messages and convert them into SAME protocol-compliant messages, and whether this requirement can be met through the deployment of an intermediary device.

- Seeks comment on whether the input and output configuration requirements in sections 11.33(a)(1) and (a)(7) should be modified to include a requirement for a single Ethernet port and eliminate the existing requirements for 1200 baud RS-232C interface.

- Seeks comment on whether section 11.33(a)(4) should be modified to require that if an alert message is derived from a CAP-formatted message, the contents of the text, assembled pursuant to ECIG Implementation Guide, should be added to the EAS device log.

- Tentatively concludes that there is no basis for revising section 11.33(a)(10) to require processing of CAP-formatted message by default when duplicate messages are received in both the EAS Protocol and CAP formats, as recommended by the Communications Security, Reliability, and Interoperability Council (CSRIC), if EAS Participants are required to translate CAP-formatted messages into SAME-formatted messages in conformance with the ECIG Implementation Guide.

- Seeks comment on whether section 11.33(a)(11) should be updated to specify that a CAP-formatted message containing a header code with the EAN event code received through a non-audio input must override all other messages.

- Seeks comment on whether the text of section 11.11(a) should be amended to include as a minimum requirement compliance with the CAP-related requirements in section 11.56, and whether the reference to "analog television broadcast stations" should be deleted.

- Seeks comment, with respect to the equipment deployment tables in section 11.11, on whether: for CAP purposes, the tables should be revised by adding a footnote to the "EAS decoder" entries in the tables, indicating that EAS Participants may elect to meet their obligation to receive and translate CAP-formatted messages by deploying an intermediary device in addition to the EAS decoder used to decode messages transmitted in the EAS Protocol; the date references in the tables (as well as cross-references to these dates in other sections of Part 11, such as section 11.51(c) and (d)), along with the entry for two-tone encoders, should be deleted; the tables covering analog, wireless, and digital cable and wireline video systems can be combined into a single table, as well as any other revisions we could make to section 11.11 to streamline it and make it easier to follow.

- Seeks comment on whether the monitoring requirements in section 11.52 or references thereto should be incorporated into section 11.11.

- Seeks comment on whether the language of section 11.20 requires a specific reference to CAP alerts and/or CAP relay networks, and whether CAP monitoring requirements need to be incorporated into section 11.20.

- Tentatively concludes that the language in section 11.21(a) should be revised to make clear that the State Area EAS Plans specify the monitoring assignments and the specific primary and backup path for SAME-formatted EANs and that the monitoring requirements for CAP-formatted EANs are set forth in section 11.52.

- Tentatively concludes that the text of sections 11.21(a) and 11.55(a) should be revised to make clear that they apply to CAP-formatted EAS messages.

- Seeks comment on whether the FCC Mapbook content requirements in section 11.21(c) should be revised to identify federal and state CAP message origination and distribution, and whether alert message distribution should be delineated in terms of how the EAN is distributed from the PEP/NP to the PN/NN stations in the state as opposed to generating a list of each individual station in the state.

- Seeks comment on whether, in light the tentative conclusion to require conversion of CAP-formatted messages into the existing EAS Protocol, there would be any utility to changing the language in section 11.31(a) to better reflect CAP's capabilities.

- Tentatively concludes that it is unnecessary to include a CAP-receiving requirement in section 11.35(a).

- Seeks comment on whether any revisions to section 11.45 are needed to accommodate CAP-formatted messages.

- Tentatively concludes that, assuming EAS Participants should only be required at this time to be capable of retrieving CAP-formatted Federal EAS alerts from RSS feeds and converting them into SAME-compliant messages for transmission to the public (and, as applicable and technically feasible, encoding them in SAME for rebroadcast), there would be no basis for revising section 11.51 to require EAS Participants to transmit (or "render") a CAP-compliant message, as recommended by CSRIC.

- Seeks comment on whether the SAME-based protocol codes should continue to be used as the baseline for deriving the visual EAS message requirements in sections 11.51(d), (g)(3), (h)(3), and (j)(2).

- Seeks comment on whether CSRIC's recommendation to mandate that CAP-formatted messages be broadcast only if the scope of the alert is "Public" should be adopted.

- Seeks comment on whether, to the extent that section 11.54(b)(1) is retained in the final rules that result from this proceeding, the language in section 11.54(b)(1) should be revised to reflect federal CAP monitoring obligations by adding a cross-reference to the monitoring requirements in section 11.52 or whether this section should be otherwise revised.

- Seeks comment on whether and how compliance with respect to CAP functionality should be incorporated into the Commission's existing certification scheme.

- Tentatively concludes that it would be inappropriate to incorporate conformance with the CAP v1.2 USA IPAWS Profile v1.0 into the Commission's certification process.

- Seeks comment on whether and how the Commission should certify equipment conformance with the ECIG Implementation Guide, including whether and how conformance testing for the ECIG Implementation Guide might be implemented.

- Seeks comment generally as to whether the current FCC certification process is sufficient or whether there are any revisions specific to EAS equipment that would make that process more effective and efficient.

- Seeks comment on whether intermediary devices should classified as stand-alone devices as opposed to modifications to existing equipment.

- Seeks comment on the certification requirements that should apply to modified EAS equipment.

- Seeks comment on whether the September 30, 2011, deadline for CAP-compliance set forth in the Waiver Order is sufficient or whether we should extend or modify it to be triggered by some action other than FEMA's adoption of CAP.

- Tentatively concludes that the obligation to receive and transmit CAP-formatted messages initiated by state governors applies only to the extent that such CAP messages have been formatted using the CAP standard adopted by FEMA for federal CAP messages – specifically, OASIS CAP Standard v1.2 and CAP v1.2 USA IPAWS Profile v1.0.

- Tentatively concludes that the obligation to receive and transmit only CAP-formatted messages initiated by state governors necessitates that such CAP messages will be translated into SAME-compliant messages consistent with the CAP-to-SAME translation standard adopted for federal CAP messages – specifically, the ECIG Implementation Guide.

- Seeks comment as to whether a new origination and/or event code would be required to fully implement the obligation of EAS Participants to process CAP-formatted messages initiated by state governors and, if so, what those codes should be.

- Seeks comment on whether the current obligation to process CAP-formatted messages delivered by the governor of the state in which the EAS Participant is located should be revised to include governors of any adjacent states in which the EAS Participant provides service.

- Tentatively concludes that the geo-targeting requirement associated with mandatory state governor alerts shall be defined, at least for the time being, by the location provisions in the EAS Protocol.

- Invites comment on whether local, county, tribal, or other state governmental entities should be allowed to initiate mandatory state and local alerts and how the Commission should decide which public officials should be permitted to activate such alerts.

- Seeks comment on whether the obligation to process CAP-formatted messages initiated by state governors should apply to Non-Participating National stations.

- Seeks comment on whether section 11.33(a)(9) should be revised to accommodate gubernatorial CAP-formatted messages.

- Seeks comment on whether there is any practical need to provide, in section 11.44 or elsewhere, gubernatorial CAP-formatted messages with priority over local EAS messages and whether such a scheme is technically feasible.

- Seeks comment on whether and how section 11.51(m) should be amended to incorporate the obligation to process CAP-formatted messages initiated by state governors.

- Seeks comment generally regarding whether the procedures for processing EANs set forth in section 11.54 and related Part 11 rule sections should be substantially simplified so that EAS Participants process EANs like any other EAS message, only on a mandatory and priority basis.

- Seeks comment on whether the option for EAS Participants to manually process EANs (but not state or local EAS messages) should be eliminated.

- Seeks comment on whether the EAT should be eliminated and replaced where necessary with the EOM in the Part 11 rules.

- Seeks comment on whether sections 11.54(b)(1), (3), (4), (10), and 11.54(c) should be deleted.

- Seeks comment on whether section 11.42 should be deleted.

- Seeks comment on whether the EAS Operating Handbook should be deleted and, if so, whether EAS Participants should be required to maintain within their facilities a copy of the current, FCC-filed and approved versions of the State and Local Area EAS Plans.

- Seeks comment on whether sections 11.54(a), (b)(2), and (5)-(8) should be deleted.

- Seeks comment on whether section 11.44 should be deleted.

- Seeks comment on whether, to the extent it should not be deleted, section 11.53 should be revised to incorporate CAP-formatted EAN messages.

- Seeks comment on whether, if streamlined EAN processing were adopted, section 11.11(a) should be revised to remove the references therein to "participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels."

- Seeks comment on whether sections 11.16 and 11.54(b)(12) should be deleted.

- Seeks comment on whether the definition for LP-1 stations in section 11.2(b) should be revised to reflect that these stations can be a radio or TV station.

- Tentatively concludes that section 11.14 should be deleted.

- Seeks comment, with respect to the PEP system definition in section 11.2(a), on whether the use of actual numbers to reflect the number of PEP stations should be eliminated, and whether the language in section 11.2(a) should be revised to clarify that the PEP stations distribute the EAN, EAS national test messages, and other EAS messages in accordance with the EAS Protocol requirements in section 11.31.

- Seeks comment on whether section 11.13 should be deleted and whether the definition for the EAN currently in section 11.13 should be moved to section 11.2.

- Tentatively concludes that the references to the Federal Information Processing Standard (FIPS) numbers (as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6–4.FIPS number codes) in section 11.31 and 11.34(d) should be replaced by references to the American National Standards Institute (ANSI) Codes INCITS 31.200x (Formerly FIPS 6-4), Codes for the Identification of Counties and Equivalent Entities of the United States, its Possessions, and Insular Areas standard that superseded it.

- Seeks comment on whether some or all of the current provisions relating to the Attention Signal in sections 11.32(9) and 11.33(b) can be deleted in favor of relying upon the minimal standard currently set forth in the EAS Protocol (at section 11.31(a)(2)) and, if so, which of the equipment-related Attention Signal requirements in sections 11.32(9) and 11.33(b) should be incorporated into section 11.31(a)(2).

- Seeks comment on whether the Attention Signal should be deleted from the Part 11 rules altogether.

- Tentatively concludes that section 11.12 should be deleted.

- Seeks comment on whether section 11.39(a)(9) and/or other Part 11 rule sections should be amended to make clear that an encoder should not transmit an EAS message that has been canceled via reset, or whether encoders should be permitted to air EAS messages that have been canceled via reset.

- Seeks comment on whether section 11.33(a)(3)(ii) should be revised by eliminating the requirement to delete messages upon expiration of their time periods, thus allowing EAS Participants to air alert messages after expiration of the effective time period set by the alert message originator.

- Tentatively concludes that the analog and digital broadcast station equipment deployment table in section 11.11(a) should be corrected so that "LPFM" and "LPTV" are identified with the columns listing the requirements for those categories, and that "LPFM" is included in sections 11.61(a)(1)(i) and 11.61(a)(2)(ii).

- Tentatively concludes that the Commission cannot provide training for state and local emergency managers.

- Seeks comment on whether CAP's expansive capacity for relaying information could be leveraged within the existing technical framework of the EAS to improve access to emergency information to the public generally, and in particular, to persons with disabilities.

B. Legal Basis

4. Authority for the actions proposed in this *Third Further Notice* may be found in sections 1, 4(i), 4(o), 303(r), 403, 624(g), and 706 of the Communications Act of 1934, as amended, (Act) 47 U.S.C. §§ 151, 154(i), 154(j), 154(o), 303(r), 544(g), and 606.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

5. The RFA directs agencies to provide a description of and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein.[10] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[11] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[12] A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[13]

6. *Small Businesses, Small Organizations, and Small Governmental Jurisdictions*. Our action may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three comprehensive, statutory small entity size standards.[14] First, nationwide, there are a total of approximately 27.5 million small businesses, according to the SBA.[15] In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[16] Nationwide, as of 2007, there were approximately 1, 621,315 small organizations.[17] Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[18] Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States.[19] We estimate that, of this total, as many as 88, 506 entities may qualify as "small governmental jurisdictions."[20] Thus, we estimate that most governmental

[10] 5 U.S.C. § 604(a)(3).

[11] 5 U.S.C. § 601(6).

[12] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[13] 15 U.S.C. § 632.

[14] *See* 5 U.S.C. §§ 601(3)–(6).

[15] *See* SBA, Office of Advocacy, "Frequently Asked Questions," web.sba.gov/faqs (last visited May 6,2011; figures are from 2009).

[16] 5 U.S.C. § 601(4).

[17] INDEPENDENT SECTOR, THE NEW NONPROFIT ALMANAC & DESK REFERENCE (2010).

[18] 5 U.S.C. § 601(5).

[19] U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2011, Table 427 (2007)

[20] The 2007 U.S Census data for small governmental organizations are not presented based on the size of the population in each such organization. There were 89, 476 small governmental organizations in 2007. If we assume that county, municipal, township and school district organizations are more likely than larger governmental organizations to have populations of 50,000 or less, , the total of these organizations is 52,125. If we make the same assumption about special districts, and also assume that special districts are different from county, municipal, township, and school districts, in 2007 there were 37,381 special districts. Therefore, of the 89,476 small governmental organizations documented in 2007, as many as 89,506 may be considered small under the applicable (continued….)

jurisdictions are small.

7. *Television Broadcasting.* The SBA defines a television broadcasting station as a small business if such station has no more than $14.0 million in annual receipts.[21] Business concerns included in this industry are those "primarily engaged in broadcasting images together with sound."[22] The Commission has estimated the number of licensed commercial television stations to be 1,390.[23] According to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) as of January 31, 2011, 1,006 (or about 78 percent) of an estimated 1,298 commercial television stations[24] in the United States have revenues of $14 million or less and, thus, qualify as small entities under the SBA definition. The Commission has estimated the number of licensed noncommercial educational (NCE) television stations to be 391.[25] We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[26] must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. The Commission does not compile and otherwise does not have access to information on the revenue of NCE stations that would permit it to determine how many such stations would qualify as small entities.

8. In addition, an element of the definition of "small business" is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply do not exclude any television station from the definition of a small business on this basis and are therefore over-inclusive to that extent. Also, as noted, an additional element of the definition of "small business" is that the entity must be independently owned and operated. We note that it is difficult at times to assess these criteria in the context of media entities and our estimates of small businesses to which they apply may be over-inclusive to this extent.

(Continued from previous page)
standard. This data may overestimate the number of such organizations that has a population of 50,000 or less. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES 2011, Tables 427, 426 (Data cited therein are from 2007).

[21] *See* 13 C.F.R. § 121.201, NAICS Code 515120 (2007).

[22] *Id*. This category description continues, "These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studios, from an affiliated network, or from external sources." Separate census categories pertain to businesses primarily engaged in producing programming. *See* Motion Picture and Video Production, NAICS code 512110; Motion Picture and Video Distribution, NAICS Code 512120; Teleproduction and Other Post-Production Services, NAICS Code 512191; and Other Motion Picture and Video Industries, NAICS Code 512199.

[23] *See* News Release, "Broadcast Station Totals as of December 31, 2010," 2011 WL 484756 (F.C.C.) (dated Feb. 11, 2011) ("*Broadcast Station Totals*"); also available at http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0211/DOC-304594A1.pdf.

[24] We recognize that this total differs slightly from that contained in *Broadcast Station Totals*, *supra*, note 15; however, we are using BIA's estimate for purposes of this revenue comparison.

[25] *See Broadcast Station Totals*, *supra*, note 15.

[26] "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both." 13 C.F.R. § 121.103(a)(1).

9. *Radio Stations.* The proposed rules and policies potentially will apply to all AM and FM radio broadcasting applicants, and proponents for new FM allotments, who qualify for the Tribal Priority adopted in the First Report and Order in this proceeding. The "Radio Stations" Economic Census category "comprises establishments primarily engaged in broadcasting aural programs by radio to the public. Programming may originate in their own studio, from an affiliated network, or from external sources."[27] The SBA has established a small business size standard for this category, which is: such firms having $7 million or less in annual receipts.[28] According to BIA/Kelsey, MEDIA Access Pro Database on January 13, 2011, 10,820 (97%) of 11,127 commercial radio stations have revenue of $7 million or less. Therefore, the majority of such entities are small entities. We note, however, that in assessing whether a business concern qualifies as small under the above size standard, business affiliations must be included.[29] In addition, to be determined to be a "small business," the entity may not be dominant in its field of operation.[30] We note that it is difficult at times to assess these criteria in the context of media entities, and our estimate of small businesses may therefore be over-inclusive.

10. *Cable and Other Program Distribution*. Since 2007, these services have been defined within the broad economic census category of Wired Telecommunications Carriers; that category is defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."[31] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees.[32] According to Census Bureau data for 2007, there were a total of 955 firms in this previous category that operated for the entire year.[33] Of this total, 939 firms had employment of 999 or fewer employees, and 16 firms had employment of 1000 employees or more.[34] Thus, under this size standard, the majority of firms can be considered small entities.

11. *Cable System Operators (Rate Regulation Standard).* The Commission has developed its own small business size standards, for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers, nationwide.[35] Industry data

[27] http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=515112&search=2007%20NAICS%20Search.

[28] NAICs Code 515112, 13 C.F.R 121.201.

[29] 15. USC 632.

[30] *Id*.

[31] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers" (partial definition), http://www.census.gov/naics/2007/def/ND517110.HTM#N517110.

[32] 13 C.F.R. § 121.201, NAICS code 517110 (2007).

[33] U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

[34] *See id*.

[35] *See* 47 C.F.R. § 76.901(e). The Commission determined that this size standard equates approximately to a size standard of $100 million or less in annual revenues. *See Implementation of Sections of the 1992 Cable Television Consumer Protection and Competition Act: Rate Regulation*, MM Docket Nos. 92-266, 93-215, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393, 7408 para. 28 (1995).

indicate that, of 1,076 cable operators nationwide, all but eleven are small under this size standard.[36] In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.[37] Industry data indicate that, of 7,208 systems nationwide, 6,139 systems have under 10,000 subscribers, and an additional 379 systems have 10,000-19,999 subscribers.[38] Thus, under this second size standard, most cable systems are small and may be affected by rules adopted pursuant to the Notice.

12. *Cable System Operators (Telecom Act Standard)*. The Act also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[39] The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate.[40] Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard.[41] We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[42] and therefore we are unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

13. *Open Video Services*. The open video system ("OVS") framework was established in 1996, and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers.[43] The OVS framework provides opportunities for the distribution of video programming other than through cable systems. Because OVS operators provide subscription services,[44] OVS falls within the SBA small business size standard covering cable services, which is "Wired

[36] These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

[37] *See* 47 C.F.R. § 76.901(c).

[38] WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "U.S. Cable Systems by Subscriber Size," page F-2 (data current as of Oct. 2005). The data do not include 718 systems for which classifying data were not available.

[39] 47 U.S.C. § 543(m)(2); *see also* 47 C.F.R. § 76.901(f) & nn.1–3.

[40] 47 C.F.R. § 76.901(f); *see FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (Cable Services Bureau 2001).

[41] These data are derived from R.R. BOWKER, BROADCASTING & CABLE YEARBOOK 2006, "Top 25 Cable/Satellite Operators," pages A-8 & C-2 (data current as of June 30, 2005); WARREN COMMUNICATIONS NEWS, TELEVISION & CABLE FACTBOOK 2006, "Ownership of Cable Systems in the United States," pages D-1805 to D-1857.

[42] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(f) of the Commission's rules.

[43] 47 U.S.C. § 571(a)(3)-(4). *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 06-189, Thirteenth Annual Report, 24 FCC Rcd 542, 606 para. 135 (2009) ("*Thirteenth Annual Cable Competition Report*").

[44] *See* 47 U.S.C. § 573.

Telecommunications Carriers."[45] The SBA has developed a small business size standard for this category, which is: all such firms having 1,500 or fewer employees. According to Census Bureau data for 2007, there were a total of 3,188 firms in this previous category that operated for the entire year.[46] Of this total, 3,144 firms had employment of 999 or fewer employees, and 44 firms had employment of 1000 employees or more.[47] Thus, under this size standard, most cable systems are small and may be affected by rules adopted pursuant to the Notice. In addition, we note that the Commission has certified some OVS operators, with some now providing service.[48] Broadband service providers ("BSPs") are currently the only significant holders of OVS certifications or local OVS franchises.[49] The Commission does not have financial or employment information regarding the entities authorized to provide OVS, some of which may not yet be operational. Thus, again, at least some of the OVS operators may qualify as small entities.

14. *Wired Telecommunications Carriers*. The 2007 North American Industry Classification System ("NAICS") defines "Wired Telecommunications Carriers" as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry."[50] The SBA has developed a small business size standard for wireline firms within the broad economic census category, "Wired Telecommunications Carriers."[51] Under this category, the SBA deems a wireline business to be small if it has 1,500 or fewer employees. Census data for 2007, which supersede data from the 2002 Census, show that 3,188 firms operated n 2007 as Wired Telecommunications Carriers. 3,144 had 1,000 or fewer employees, while 44 operated with more than 1,000 employees.[52]

15. *Broadband Radio Service and Educational Broadband Service (FCC Auction Standard)*. The established rules apply to Broadband Radio Service ("BRS," formerly known as Multipoint Distribution Systems, or "MDS") operated as part of a wireless cable system. The Commission has

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[45] U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers"; http://www.census.gov/naics/2007/def/ND517110.HTM#N517110.

[46] U.S. Census Bureau, 2007 Economic Census, Subject Series: Information, Table 5, Employment Size of Firms for the United States: 2007, NAICS code 5171102 (issued Nov. 2010).

[47] *See id*.

[48] A list of OVS certifications may be found at http://www.fcc.gov/mb/ovs/csovscer.html.

[49] *See Thirteenth Annual Cable Competition Report*, 24 FCC Rcd at 606-07 para. 135. BSPs are newer firms that are building state-of-the-art, facilities-based networks to provide video, voice, and data services over a single network.

[50] *See* U.S. Census Bureau, 2007 NAICS Definitions, "517110 Wired Telecommunications Carriers," http://www.census.gov/naics/2007/def/ND517110.HTM#N517110 (last visited May 11, 2011).

[51] 13 C.F.R. § 121.201 (NAICS code 517110).

[52] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en (last visited May 11, 2011).

defined "small entity" for purposes of the auction of BRS frequencies as an entity that, together with its affiliates, has average gross annual revenues that are not more than $40 million for the preceding three calendar years.[53] The SBA has approved this definition of small entity in the context of MDS auctions.[54] The Commission completed its MDS auction in March 1996 for authorizations in 493 basic trading areas. Of 67 winning bidders, 61 qualified as small entities. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities.[55] After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules. In 2009, the Commission conducted Auction 86, which offered 78 BRS licenses.[56] Auction 86 concluded with ten bidders winning 61 licenses.[57] Of the ten, two bidders claimed small business status and won 4 licenses; one bidder claimed very small business status and won three licenses; and two bidders claimed entrepreneur status and won six licenses.[58]

16. The proposed rules would also apply to Educational Broadband Service ("EBS," formerly known as Instructional Television Fixed Service, or "ITFS") facilities operated as part of a wireless cable system. The SBA definition of small entities for pay television services, Cable and Other Subscription Programming, also appears to apply to EBS.[59] There are presently 2,032 EBS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business.[60] However, we do not collect annual revenue data for EBS licensees and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, we tentatively conclude that at least 1,932 are small businesses and may be affected by the proposed rules.

[53] 47 C.F.R. § 21.961(b)(1).

[54] *See Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, MM Docket No. 94-131 and PP Docket No. 93-253, Report and Order, 10 FCC Rcd 9589 (1995).

[55] 47 U.S.C. § 309(j). The Commission licensed hundreds of stations to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard.

[56] *Auction 86 Procedures Public Notice*, 24 FCC Rcd at 8280.

[57] "Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period," *Public Notice*, 24 FCC Rcd 13,572 (WTB 2009).

[58] The Commission's standards for small business bidding credits for BRS are set forth in section 27.1218, 47 C.F.R. § 27.1218. *See also* "Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86," *Public Notice*, 24 FCC Rcd 8277, 8296 (WTB 2009) (*Auction 86 Procedures Public Notice*).

[59] 13 C.F.R. § 121.201, NAICS code 515210.

[60] 5 U.S.C. § 601(3).

17. *Wireless Telecommunications Carriers (except Satellite)*. Since 2007, the Census Bureau has placed wireless firms within this new, broad, economic census category.[61] Prior to that time, such firms were within the now-superseded categories of "Paging" and "Cellular and Other Wireless Telecommunications."[62] Under the present and prior categories, the SBA has deemed a wireless business to be small if it has 1,500 or fewer employees.[63] For the category of Wireless Telecommunications Carriers (except Satellite), Census data for 2007, which supersede data contained in the 2002 Census, show that there were 1,383 firms that operated that year.[64] Of those 1,383, 1,368 had fewer than 100 employees, and 15 firms had more than 100 employees. Thus under this category and the associated small business size standard, the majority of firms can be considered small. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) Telephony services.[65] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[66] Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

18. *Incumbent Local Exchange Carriers (LECs)*. We have included small incumbent LECs in this IRFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (*e.g.*, a telephone communications business having 1,500 or fewer employees) and "is not dominant in its field of operation."[67] The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[68] We have therefore included small incumbent local exchange carriers in this RFA analysis, although we emphasize that this RFA action has no effect on Commission analyses and determinations in other, non-RFA contexts. Neither the Commission nor the SBA has developed a small business size standard specifically for incumbent local exchange services. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under

[61] U.S. Census Bureau, 2007 NAICS Definitions, "Wireless Communications Carriers (Except Satellite), NAICS code 517210"; http://www.census.gov/naics/2007/def/ND517210.HTM#N517210.

[62] U.S. Census Bureau, 2002 NAICS Definitions, "517211 Paging"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.; U.S. Census Bureau, 2002 NAICS Definitions, "517212 Cellular and Other Wireless Telecommunications"; http://www.census.gov/epcd/naics02/def/NDEF517.HTM.

[63] 13 C.F.R. § 121.201, NAICS code 517210 (2007 NAICS). The now-superseded, pre-2007 C.F.R. citations were 13 C.F.R. § 121.201, NAICS codes 517211 and 517212 (referring to the 2002 NAICS).

[64] U.S. Census Bureau, 2007 Economic Census, Sector 51, 2007 NAICS code 517210 (rel. Oct. 20, 2009), http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=700&-ds_name=EC0751SSSZ5&-_lang=en.

[65] *See Trends in Telephone Service* at Table 5.3.

[66] *See id*.

[67] 15 U.S.C. § 632.

[68] Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (May 27, 1999). The Small Business Act contains a definition of "small-business concern," which the RFA incorporates into its own definition of "small business." *See* 15 U.S.C. § 632(a) (Small Business Act); 5 U.S.C. § 601(3) (RFA). SBA regulations interpret "small business concern" to include the concept of dominance on a national basis. *See* 13 C.F.R. § 121.102(b).

that size standard, such a business is small if it has 1,500 or fewer employees.[69] According to Commission data,[70] 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees, and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our proposed rules.

19. *Competitive (LECs), Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[71] According to Commission data,[72] 769 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 769 carriers, an estimated 676 have 1,500 or fewer employees, and 93 have more than 1,500 employees. In addition, 12 carriers have reported that they are "Shared-Tenant Service Providers," and all 12 are estimated to have 1,500 or fewer employees. In addition, 39 carriers have reported that they are "Other Local Service Providers." Of the 39, an estimated 38 have 1,500 or fewer employees, and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities.

20. *Satellite Telecommunications Providers*. Two economic census categories address the satellite industry. The first category has a small business size standard of $15 million or less in average annual receipts, under SBA rules.[73] The second has a size standard of $25 million or less in annual receipts.[74]

21. The category of Satellite Telecommunications "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."[75] Census Bureau data for 2007 show that 512 Satellite Telecommunications firms that operated for that entire year.[76] Of this total, 464 firms had annual receipts of under $10 million, and 18 firms had receipts of $10 million to $24,999,999.[77] Consequently, the majority of Satellite Telecommunications firms can be considered small entities.

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[69] 13 C.F.R. § 121.201, NAICS code 517110.

[70] *Trends in Telephone Service,* Table 5.3.

[71] 13 C.F.R. § 121.201, NAICS code 517110.

[72] *Trends in Telephone Service,* Table 5.3.

[73] 13 C.F.R. § 121.201, NAICS code 517410.

[74] 13 C.F.R. § 121.201, NAICS code 517919.

[75] U.S. Census Bureau, 2007 NAICS Definitions, "517410 Satellite Telecommunications."

[76] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.

[77] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en

22. The second category, i.e. "All Other Telecommunications" comprises "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry."[78] For this category, Census Bureau data for 2007 show that there were a total of 2,383 firms that operated for the entire year.[79] Of this total, 2,347 firms had annual receipts of under $25 million and 12 firms had annual receipts of $25 million to $49, 999,999.[80] Consequently, the Commission estimates that the majority of All Other Telecommunications firms are small entities that might be affected by our action.

23. *Direct Broadcast Satellite ("DBS") Service*. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS, by exception, is now included in the SBA's broad economic census category, "Wired Telecommunications Carriers,"[81] which was developed for small wireline firms. Under this category, the SBA deems a wireline business to be small if it has 1,500 or fewer employees.[82] To gauge small business prevalence for the DBS service, the Commission relies on data currently available from the U.S. Census for the year 2007. According to that source, there were 3,188 firms that in 2007 were Wired Telecommunications Carriers. Of these, 3,144 operated with less than 1,000 employees, and 44 operated with more than 1,000 employees. However, as to the latter 44 there is no data available that shows how many operated with more than 1,500 employees. Based on this data, the majority of these firms can be considered small.[83] Currently, only two entities provide DBS service, which requires a great investment of capital for operation: DIRECTV and EchoStar Communications Corporation ("EchoStar") (marketed as the DISH Network).[84] Each currently offers subscription services. DIRECTV[85] and EchoStar[86] each report annual revenues that are in excess of the threshold for a small

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[78] *http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search*

[79] U.S. Censhttp://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en.

[80]http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-_skip=900&-ds_name=EC0751SSSZ4&-_lang=en .

[81] *See* 13 C.F.R. § 121.201, NAICS code 517110 (2007). The 2007 NAICS definition of the category of "Wired Telecommunications Carriers" is in paragraph 7, above.

[82] 13 C.F.R. § 121.201, NAICS code 517110 (2007).

[83] *See* http://www.factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=600&-ds_name=EC0751SSSZ5&-_lang=en.

[84] S*ee Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Thirteenth Annual Report,, 24 FCC Rcd 542, 580, ¶ 74 (2009) ("*13th Annual Report*"). We note that, in 2007, EchoStar purchased the licenses of Dominion Video Satellite, Inc. ("Dominion") (marketed as Sky Angel). *See* Public Notice, "Policy Branch Information; Actions Taken," Report No. SAT-00474, 22 FCC Rcd 17776 (IB 2007).

[85] As of June 2006, DIRECTV is the largest DBS operator and the second largest MVPD, serving an estimated 16.20% of MVPD subscribers nationwide. *See 13th Annual Report*, 24 FCC Rcd at 687, Table B-3.

business. Because DBS service requires significant capital, we believe it is unlikely that a small entity as defined by the SBA would have the financial wherewithal to become a DBS service provider.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

24. There are possible revisions to current Part 11 reporting or recordkeeping requirements proposed in this *Third Further Notice*, specifically as regards:

- Potential revisions modifying section 11.33(a)(4) to require that if an alert message is derived from a CAP-formatted message, the contents of the text, assembled pursuant to ECIG Implementation Guide, should be added to the EAS device log. This revision merely applies a current reporting requirement to a new technical protocol and we do not expect it to alter the reporting burden to any appreciable degree.

- Our tentatively conclusion that the language in section 11.21(a) should be revised to make clear that the State EAS Plans specify the monitoring assignments and the specific primary and backup path for SAME-formatted EANs. This revision merely applies a current reporting requirement to a new technical protocol and we do not expect it to alter the reporting burden to any appreciable degree. The revision will ensure the accuracy of EAS operational documents and thus contribute to public safety. Accordingly, the Commissions believes the revision to be necessary.

25. The proposals set forth in this *Third Further Notice* are intended to advance our public safety mission and enhance the performance of the EAS while reducing regulatory burdens wherever possible.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

26. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."[87]

27. EAS Participants already are required to comply with the CAP-related obligations set forth in sections 11.55 and 11.56. The *Third Further Notice* seeks comment on dozens of potential revisions to Part 11 of the Commission's rules that are necessary in order for EAS Participants to meet these existing obligations and, more generally, to streamline and make more efficient the operation of the EAS. The majority of the rule revisions under consideration are not designed to introduce new obligations that do not already exist, but rather, more clearly identify and effect within Part 11 the CAP obligations adopted in the *Second Report and Order*. In this regard, these revisions are designed to minimally impact all EAS

(Continued from previous page)

[86] As of June 2006, DISH Network is the second largest DBS operator and the third largest MVPD, serving an estimated 13.01% of MVPD subscribers nationwide. *Id*. As of June 2006, Dominion served fewer than 500,000 subscribers, which may now be receiving "Sky Angel" service from DISH Network. *See id*. at 581, ¶ 76.

[87] 5 U.S.C. § 603(c)(1) – (c)(4).

Participants, including small entities, to the extent feasible, while at the same time protecting the lives and property of all Americans, which confers a direct benefit on small entities. For example, the rule revisions under consideration would maintain the existing EAS architecture and potentially permit affected parties to meet their CAP-related obligations via intermediary devices, which potentially may alleviate the need to obtain new EAS equipment for many EAS Participants. Similarly, the proposed revisions to EAN processing would make the Part 11 rules simpler both to understand and implement within equipment designs. Because the proposed revisions are required to implement existing obligations within Part 11, no alternatives were considered. However, commenters are invited to suggest steps that the Commission may take to further minimize any significant economic impact on small entities. When considering proposals made by other parties, commenters are invited to propose alternatives that serve the goal of minimizing the impact on small entities.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

28. None.