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

In the Matters 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	)	

SECOND REPORT AND ORDER AND FURTHER NOTICE OF PROPOSED RULEMAKING

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I. INTRODUCTION

1. In this *Second Report and Order* (*Order*), we revise the Commission's Part 11 Emergency Alert System (EAS) rules as part of our continuing effort to provide the American public a state-of-the-art, next-generation national EAS ("Next Generation EAS").[1] We also take steps today to fulfill the Commission's responsibilities under the President's Public Alert and Warning System Executive Order.[2] Specifically, in order to ensure the efficient, rapid, and

[1] *See* 47 C.F.R. Part 11. In 2005, the Commission sought comment on expediting the development of a Next Generation EAS network. *See* Review of the Emergency Alert System, EB Docket No. 04-296, *First Report and Order and Further Notice of Proposed Rulemaking*, 20 FCC Rcd 18625 (2005) (*First Report and Order and Further Notice*). Appendix A provides a list of commenters to the *Further Notice* and abbreviated names. *See also* Review of the Emergency Alert System, EB Docket No. 04-296, *Notice of Proposed Rulemaking*, 19 FCC Rcd 15775 (2004) (*2004 NPRM*). XM Radio, Inc. filed a petition for reconsideration of the requirement adopted in the *First Report and Order* for Satellite Digital Audio Radio Service (SDARS) to conduct weekly and monthly tests on every channel. Separately, PanAmSat, SES Americom, and Intelsat jointly petitioned for reconsideration, arguing that EAS requirements adopted in the *First Report and Order* should not apply to fixed satellite service (FSS) operators on Ku-band frequencies selling or leasing satellite capacity to direct-to-home (DTH) distributors. The Commission will address these petitions, and related filings, in a subsequent order(s).

[2] Public Alert and Warning System, Exec. Order No. 13407, 71 Fed. Reg. 36975 (June 26, 2006) (*Executive Order*). Section 3(b)(iii) of the *Executive Order* directs the Commission to "adopt rules to ensure that communications (continued….)

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), we adopt a requirement for various entities required to participate in EAS pursuant to this *Order* and prior Commission orders (EAS Participants) to accept a message using a common EAS messaging protocol, Common Alerting Protocol v1.1 (CAP),[3] no later than 180 days after FEMA publicly publishes its adoption of such standard. Second, we require EAS Participants to adopt Next Generation EAS delivery systems no later than 180 days after FEMA publicly releases standards for those systems. Third, we preserve the current EAS network but enhance its effectiveness, scope, and redundancy by enabling EAS delivery system upgrades and by including wireline common carriers providing video programming ("Wireline Video Providers") in EAS. Fourth, we require 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,[4] provided that the state has a Commission-approved EAS state plan that provides for delivery of such alerts.[5] Fifth, we concurrently adopt a Further Notice of Proposed Rulemaking to explore further certain EAS-related issues. In sum, the actions that we take today will increase the reliability, security, and efficacy of the nation's EAS network and will enable the President, the National Weather Service (NWS),[6] and state officials to rapidly communicate with citizens in times of crisis, over multiple communications platforms.

II. BACKGROUND AND SUMMARY

2. *Further Notice*. In the November 2005 *Further Notice*, the Commission sought comment on how to improve EAS. It stated that a reliable "wide-reaching public alert and warning system is critical to public safety" and that the EAS network should permit "officials at the national, state and local levels to reach affected citizens in the most effective and efficient manner possible."[7] The Commission requested comment on a wide range of issues, including: enhancing the EAS network architecture and message distribution,[8] adopting a common EAS messaging protocol,[9] the feasibility of satellite television and radio service providers delivering

(Continued from previous page)
systems have the capacity to transmit alerts and warnings to the public as part of the public alert and warning system."

[3] Cap v1.1 was developed by the Organization for the Advancement of Structured Information Standards (OASIS), a non-profit, international consortium that develops standards. *See* http://www.oasis-open.org/home/index.php.

[4] 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 also will have this capability. 47 U.S.C. § 153(40) ("the term "state" includes the District of Columbia and the Territories and possessions").

[5] See 47 C.F.R. § 11.21, and discussion at ¶¶ 14, 53-64 *infra*.

[6] The National Weather Service is the primary source of weather data, forecasts and warnings for the United States. *See* http://www.nws.noaa.gov/. It is an organization within the National Oceanic and Atmospheric Administration (NOAA).

[7] *Further Notice*, 20 FCC Rcd at 18651, ¶ 62.

[8] *Id.* at 18652, ¶ 66.

[9] *Id.* at 18652, ¶ 67.

state and local emergency messages,[10] whether to require Wireline Video Providers to transmit EAS alerts,[11] and the provision of EAS alerts to persons with sight and hearing disabilities.[12] The Commission also sought comment on providing EAS alerts to non-English speakers,[13] and on certain related issues raised in a Petition for Immediate Relief, which was jointly filed by the Independent Spanish Broadcasters Association, the Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council on September 22, 2005.[14] Numerous parties filed detailed comments and made presentations to FCC staff in response to the *Further Notice*, resulting in a well-developed record.[15]

3. Congress established the Commission "for the purpose of the national defense, [and] for the purpose of promoting the safety of life and property through the use of wire and radio communication" networks.[16] For nearly fifty years, the Commission has implemented this mandate, in part, by affording the American public an effective national alert and warning system. During most of its existence, this system was known as the Emergency Broadcast System (EBS).[17] Its name was changed to the Emergency Alert System in 1994, however, when it was upgraded and automated.[18]

4. As explained in more detail below, it is well established that the Commission has authority to regulate participation in EAS under Sections 1, 4(i) and (o), 303(r), and 706 of the Communications Act.[19] The Commission, in conjunction with FEMA and NWS, implements EAS at the federal level. Their respective roles are based on a 1981 Memorandum of Understanding between FEMA, NWS, and the Commission,[20] a 1984 Executive Order,[21] and a

[10] *Id.* at 18652-53, ¶ 68.

[11] *Id.* at 18653, ¶¶ 69, 70.

[12] *Id.* at 18654-57, ¶¶ 74-80.

[13] *Id.* at 18657-58, ¶ 81.

[14] *Id.*

[15] The record is available on the Commission's Electronic Comment Filing System, at http://gullfoss2.fcc.gov/prod/ecfs/comsrch_v2.cgi.

[16] 47 U.S.C § 151.

[17] A more detailed history of EAS is set forth in the first Notice of Proposed Rulemaking in this docket. *See 2004 NPRM*, 19 FCC Rcd at 15776-77, ¶¶ 6-8.

[18] *See* Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System, FO Docket Nos. 91-301, 91-171, *Report and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 1786 (1994) (*1994 Report and Order*) (subsequent history omitted).

[19] 47 U.S.C. §§ 151, 154(i) and (o), 303(r), 606.

[20] *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.

[21] *See* Assignment of National Security and Emergency Preparedness Telecommunications Functions, Exec. Order No. 12472, 49 Fed. Reg. 13471 (1984).

1995 Presidential Statement of EAS Requirements.[22] In addition, State Emergency Coordination Committees ("SECCs") and Local Emergency Coordination Committees ("LECCs") develop state and local EAS plans. FEMA, NWS, and the Commission work closely with EAS participants as well as state, local, and tribal governments to ensure the integrity and utility of EAS.

5. *Executive Order*. On June 26, 2006, pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended,[23] and the Homeland Security Act of 2002, as amended,[24] President George W. Bush issued a "Public Alert and Warning System" Executive Order. The *Executive Order* provides, in relevant part, that:

> It 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), taking appropriate account of the functions, capabilities, and needs of the private sector and of all levels of government in our Federal system, and to ensure that under all conditions the President can communicate with the American people.[25]

6. The *Executive Order* requires 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."[26] Under the *Executive Order*, the Secretary must submit a plan to the President for implementation of the order,[27] and issue guidance that addresses the subject matter of the *1995 Presidential Statement*.[28] Upon issuance of such guidance, the *1995 Presidential Statement* will be revoked.

7. Section 3(b)(iii) of the *Executive Order* 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."[29] The Commission is

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[22] FEMA acts as Executive Agent for the development, operation, and maintenance of the national-level EAS. *See Memorandum,* Presidential Communications with the General Public During Periods of National Emergency*,* The White House (Sept. 15, 1995) (*1995 Presidential Statement*).

[23] 42 U.S.C. § 5121 *et seq*.

[24] 6 U.S.C. § 101 *et seq*. The Homeland Security Act of 2002 authorizes the Secretary of Homeland Security, acting through the Under Secretary for Emergency Preparedness and Response, to develop "a comprehensive national incident management system with Federal, State, and local government personnel, agencies, and authorities," in order to respond to terrorist attacks, major disasters, and other emergencies. 6 U.S.C § 312(5).

[25] *Executive Order*, section 1.

[26] *Id.*, sections 2(a)(ii).

[27] *Id.*, section 4.

[28] *Id.*, section 5(b).

[29] *Id.*, section 3(b)(iii).

committed to working with the Secretary, FEMA, and other governmental entities to ensure the effective implementation of the *Executive Order*.

8. *WARN Act.* On October 13, 2006, the President signed the Security and Accountability For Every Port Act (Safe Port Act) into law. Title VI of the SAFE Port Act – the Warning, Alert and Response Network Act ("WARN Act") – establishes a framework for commercial mobile service (CMS) providers to voluntarily elect to transmit emergency alerts.[30] As the statute required, the Commission established a Commercial Mobile Service Alert Advisory Committee that is developing recommendations for technical standards and protocols to facilitate the voluntary transmission of emergency alerts by CMS providers.[31] The Committee must submit its recommendations to the Commission within one year of the enactment of the statute.[32] Following the submission of the Committee's recommendations, the Commission will initiate a rulemaking to develop technical standards and other requirements to facilitate CMS providers' transmission of emergency alerts.[33] Accordingly, in light of the passage of the WARN Act, we do not address commercial wireless carrier participation in EAS in this *Order*.

9. *Independent Panel*. In January 2006, Chairman Kevin J. Martin established a Federal Advisory Committee to study the impact of Hurricane Katrina on communications infrastructure,[34] which submitted a comprehensive report to the Commission on June 12, 2006. The Commission, in turn, issued a Notice of Proposed Rulemaking on June 19, 2006, to address the panel's recommendations, including what actions it could take to improve communication of emergency information to the public.[35] The Independent Panel recommended that the Commission improve and facilitate the use of the EAS network during disasters, educate state and local officials and the public about EAS, and ensure that the disabled and non-English

[30] Security and Accountability For Every Port Act, Pub. L. No. 109-347, 120 Stat. 1936-1943 (2006).

[31] WARN Act § 603(a). The Commission announced the members of the Committee on December 5, 2006. Notice of Appointment of Members to the Commercial Mobile Service Alert Advisory Committee; Agenda for December 12, 2006 Meeting, *Public Notice*, 21 FCC Rcd 14175 (2006).

[32] WARN Act § 603(c).

[33] WARN Act § 603(a) and (b).

[34] *See* 71 Fed. Reg. 933 (Jan. 6, 2006). The panel was known as the "Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks" (Independent Panel).

[35] *See* Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, EB Docket. No. 06-119, *Notice of Proposed Rulemaking*, 21 FCC Rcd 7320 (2006) (*Hurricane Katrina NPRM*). The Notice also sought comment in three other broad areas: (1) pre-positioning the communications industry and the government for disasters in order to achieve greater network reliability and resiliency; (2) improving recovery coordination to address existing shortcomings and to maximize the use of existing resources; and (3) improving the operability and interoperability of public safety and 911 communications during crises.

speaking communities have ready access to EAS warnings.[36] The panel also noted that wireless technology offers the potential for enhancing the existing EAS network.[37]

10. Accordingly, we take key steps today necessary to ensure the development of a next-generation EAS network, steps which are grounded in the Commission's November 2005 *Further Notice* and related record. We also seek to implement the Commission's responsibilities under the President's *Executive Order* and to address certain of the EAS-related recommendations of the Hurricane Katrina Independent Panel.

11. *Current EAS Participants and Message Distribution*. EAS equipment is in place in television, radio, and cable facilities nationwide and has been used effectively for state and local emergencies for decades. The EAS currently is comprised of analog and digital radio broadcast stations, including AM, FM, and low-power FM stations; analog and digital television (DTV) broadcast stations, including Class A television and low-power TV stations; analog, digital, and wireless cable systems; Direct Broadcast Satellite (DBS) systems, Satellite Digital Audio Radio Systems (SDARS); and other entities and industries operating on an organized basis during emergencies at the national, state, and local levels.[38] EAS messages currently are distributed via a multi-level distribution system.[39] The current EAS network includes numerous message entry and distribution points:

- **National Primary** (NP) stations are the primary entry point for Presidential messages delivered by FEMA.[40] These stations are responsible for broadcasting a Presidential alert to the public and to State Primary stations within their broadcast range.[41]
- **State Primary** (SP) stations are the entry point for State messages, which can originate from the Governor or a designated representative. Messages may then be sent via the State Relay Network.[42]
- **State Relay** (SR) stations are part of the State Relay Network and relay National and State emergency messages into Local Areas.[43]

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[36] *Hurricane Katrina NPRM*, 21 FCC Rcd at 7326-27, ¶ 18 (noting that EAS was not used by state and local officials to provide emergency evacuation information). *Id*. at Appendix B, Report and Recommendations to the Federal Communications Commission, p. 28.

[37] *Id*. As we discuss herein, because the WARN Act makes EAS participation voluntary for commercial mobile service providers and mandates that the Commission initiate a rulemaking regarding such participation at a later date, today's *Order* does not address wireless EAS participation.

[38] *See* 47 C.F.R. § 11.11. SDARS and DBS were required to participate in the existing EAS by December 31, 2006 and May 31, 2007, respectively. *First Report and Order*, 20 FCC Rcd at 18641-43.

[39] A system in which stations relay emergency messages from one to others is also known as a daisy-chain. *See 1994 Report and Order*, 10 FCC Rcd at 1790-91, ¶ 10 n.9.

[40] 47 C.F.R. § 11.18(a).

[41] 47 C.F.R. § 11.14.

[42] 47 C.F.R. § 11.18(c).

[43] 47 C.F.R. § 11.18(d). The State Relay Network is composed of state relay sources, leased common carrier communications facilities, or any other available communication facilities. In addition to EAS monitoring, satellites, (continued….)

- **Local Primary** (LP) stations provide EAS Local Area messages. An LP source is responsible for coordinating the carriage of emergency messages from sources such as the NWS or local emergency management offices as specified in its EAS Local Area Plan. LP stations receive Presidential and State EAS messages from SP and SR stations.
- **Participating National** (PN) stations transmit EAS National, State, or Local Area messages directly to the public.
- **Non-participating National** (NN) sources have elected not to participate in the National level EAS and hold an authorization letter to that effect. They may transmit EAS State or Local Area messages.[44]

12. *EAS Protocol*. All EAS message originators (whether FEMA, NWS, or a state or local authority) currently must transmit messages using the EAS protocol and codes specified in section 11.31 of the Commission's rules.[45] Dedicated equipment currently is required to initiate, receive, and retransmit EAS alerts, and must be installed by every EAS Participant. Sections 11.32 and 11.33 of the Commission's rules set forth minimum requirements for EAS encoders and decoders, respectively,[46] the functions of which can be combined into a single unit referred to as an Encoder/Decoder (ENDEC).[47] In this *Order*, once FEMA adopts the CAP protocol, we require existing EAS Participants to receive alert messages formatted to CAP, a standard alert message format that specifies data fields to facilitate data sharing across different distribution systems.[48] As explained below, timely adoption of CAP by all EAS Participants is an essential component of and prerequisite for the development of Next Generation EAS.

13. *New EAS Participants*. The Commission enhanced the EAS network in the 1990s to include cable television systems[49] and wireless cable systems.[50] The Commission further

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microwave, FM subcarrier, or any other communications technology may be used to distribute state emergency messages. 47 C.F.R. § 11.20.

[44] 47 C.F.R. § 11.18(d). Upon activation of the national level EAS, NN sources are required to broadcast the EAS codes, Attention Signal, and the sign-off announcement in the EAS Operating Handbook, and then stop operating. All NN sources are required to comply with 47 C.F.R §§ 11.51, 11.52 and 11.61.

[45] 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 valid time period of the alert); (2) audio attention signal; (3) message; and (4) preamble and EAS end of message codes. 47 C.F.R. § 11.31(a).

[46] 47 C.F.R. §§ 11.32, 11.33.

[47] 47 C.F.R. § 11.34(c). EAS equipment also provides a means to automatically interrupt regular programming and is capable of providing warnings in the primary language that is used by the station or cable system. *See* 47 C.F.R. §§ 11.33(a)(4), 11.51(k)(1), 11.54.

[48] A CAP-formatted alert may include fields for message type, scope, event information, event certainty, sender, geographic scope, and expiration, among others. CAP-formatted messages also can include links to data, audio and video files, and can be validated and authenticated through the use of digital signatures and encryption.

[49] *EAS 1994 Report and Order*, 10 FCC Rcd 1786.

[50] Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System, FO Docket Nos. 91-301, 91-171, *Second Report and Order*, 12 FCC Rcd 15503 (1997).

enhanced the EAS network in 2005 to include providers of DTV,[51] digital audio broadcasts (DAB), digital cable television, DBS, and SDARS.[52] In order to increase the reliability and efficacy of the nation's EAS network, and for other reasons stated below, we augment the EAS distribution network to include Wireline Video Providers.

14. *State EAS Alerts*. The EAS network originally was conceived to provide the President with the ability to rapidly communicate via radio and TV broadcast networks with the American public during a national crisis, such as a nuclear attack.[53] The system also has been used for the provision of state and local emergency alerts to the public since it was opened to state and local participation in 1963. Several thousand state and local EAS messages are transmitted annually. More than 70 percent of all state and local EAS messages are vital weather-related alerts (such as flash flood, hurricane, and tornado warnings), which are originated by the NWS via the NOAA Weather Radio (NWR) network.[54] NWR includes more than 940 transmitters covering all 50 states and the District of Columbia, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories.[55] NWR uses an EAS compatible digital protocol,[56] which supplies local EAS encoded alerts to broadcast and cable EAS entry points pursuant to EAS state and local plans.[57] Under the Commission's current EAS rules, EAS Participants may voluntarily transmit NWS, state, and local EAS messages to the

[51] DTV is any digital technology used to provide advanced television services such as high definition television programming, multiple standard definition programming streams, and other advanced features and services. *See* Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, MM Docket No. 87-268, *Sixth Further Notice of Proposed Rulemaking*, 11 FCC Rcd 10968, 10970 n.1 (1996).

[52] *See First Report and Order*, 20 FCC Rcd at 18632-650, ¶¶ 19-58.

[53] The Commission's EAS rules are intended to ensure that national activation of EAS would enable the President to communicate with the American public within ten minutes from any location at any time. These messages must take priority over any other messages and preempt other messages in progress. *First Report and Order*, 20 FCC Rcd at 18628, ¶ 8; 47 C.F.R. § 11.44(a).

[54] *See* The Emergency Alert System (EAS): An Assessment, Partnership for Public Warning Report 2004-1, at 7 and Appendix E (EAS Activation Statistics); *see also* CEA Comments at 3-4 (stating that EAS alerts most often are originated on a local, regional, or state level using NWR facilities and then broadcast simultaneously directly to the public and to EAS Participants), Radio Shack Comments at 6 (stating that NWR is, or should be, the backbone of EAS). NOAA describes NWR as an "All Hazards" radio network—a single source for comprehensive weather and emergency information. *See* http://www.nws.noaa.gov/nwr/ (August 30, 2006).

[55] *See* http://www.nws.noaa.gov/nwr/ (March 6, 2007). According to CEA, NWR covers 97 percent of the country. *See* CEA Comments at 4. NWR requires a special radio receiver (that can be programmed to respond to messages by the type of event and location) or scanner capable of receiving the signal in the 162 MHz (VHF) public service band on one of seven frequencies. *See* http://www.nws.noaa.gov/nwr/ (March 6, 2007). The seven NWR frequencies (MHz) are: 162.400, 162.425, 162.450, 162.475, 162.500, 162.525, and 162.550. *Id.*

[56] The digital protocol is known as Specific Area Message Encoding (SAME). *See* The Emergency Alert System (EAS): An Assessment, Partnership for Public Warning Report 2004-1, at 18.

[57] *See id*. at 7. In some localities, emergency managers can originate EAS alerts through NWS, through a broadcaster or cable operator, or through their own equipment if they have made prior arrangements that are documented in EAS plans. *Id.*

public.[58] If they do, they must follow the Commission's Part 11 EAS rules. In this *Order*, we find that the public interest will be served by continuing to allow these entities to voluntarily participate in the delivery of NWS and certain state and local messages via the existing EAS. As explained more fully below, however, we will enable state governors (or their designees) to deliver CAP-formatted EAS messages to EAS Participants on both existing and Next Generation EAS. EAS Participants must then issue message-based alerts based on the information received.

III. DISCUSSION

A. Next Generation EAS

15. In this *Order*, we reaffirm the obligations of today's EAS Participants to maintain existing EAS and establish the framework for the nation's Next Generation EAS. This 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. We also take steps to ensure that the upgraded EAS will meet the needs of all Americans, including persons with hearing and vision disabilities and those who do not speak English. Finally, we will continue to harness the benefits of existing EAS while the Next Generation EAS is developed and deployed. The combination of the existing and Next Generation EAS systems will ensure the continuity of EAS while the Next Generation EAS is being implemented, and ensure that EAS alerts reach the largest number of affected people by multiple communications paths as quickly as possible.

16. Below, we describe the four cornerstones of the Next Generation EAS: 1) maintaining the existing EAS network; 2) utilizing a common messaging protocol, CAP, to be implemented by all EAS Participants 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.

1. Maintaining Existing EAS

17. Although a Presidential alert has never been sent over the EAS, the current EAS network has been used for state, local, and weather–related emergencies. We recognize that in certain emergency situations, battery-powered AM or FM receivers may be the primary source of emergency information for the general public. Broadcast and cable personnel are familiar with current EAS equipment and are trained in its use. In addition, it would be inadvisable to require immediate use of a new system until that system is fully in place and its reliability tested. We therefore do not agree with those commenters who argue that the existing EAS should be wholly abandoned or replaced at this time.[59]

18. Instead, we conclude that broadcast, cable and other current EAS Participants should maintain the existing EAS, particularly since alternative delivery mechanisms, although

[58] 47 C.F.R. § 11.55(a); *see also* Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System, EB Docket No. 01-66, *Report and Order*, 17 FCC Rcd 4055, 4056-57, ¶ 3 (2002) (*2002 Report and Order*); *1994 Report and Order,* 10 FCC Rcd at 1809, ¶ 66.

[59] *See, e.g.,* SBE Comments at 10; WTOP 10/29/04 Comments at 8.

potentially more robust, have yet to be deployed.[60] We recognize, however, that EAS currently uses a station-relay message dissemination process that lacks the flexibility and redundancy of certain evolving digital communications systems.[61] Consequently, we also require these current EAS Participants to upgrade their networks to the Next Generation EAS, as discussed below, while maintaining existing EAS.

19. *NOAA Weather Radio*. In addition, we disagree with those commenters who suggest that NWR should replace the existing EAS. We believe, however, that the NWR system should continue to be closely integrated with EAS. NWR is one of the principal sources of alert information,[62] and is likely to continue to be the primary originator of weather-based alerts. We also recognize that voluntary efforts, including CEA's Public Alert™ Certification and Logo Program launched in April 2004, further enhance the value and potential of this proven emergency-alert delivery system.[63] The record demonstrates that redundant alert-delivery systems will enhance the overall reach, efficacy, and reliability of the EAS as a whole. NWR provides an alternative source of emergency alerts, and we expect that it will continue to be an important component of EAS and the overall national public alert and warning system. We nevertheless caution EAS Participants that retransmit NWR alerts to ensure that such retransmission is consistent with our EAS rules and associated protocols.

2. Common Alerting Protocol (CAP) for EAS

20. In the *Further Notice,* the Commission sought comment on the widespread assertion in the record that a common messaging protocol should be adopted to permit a digitally-based alert or warning to be distributed simultaneously over multiple platforms.[64] The Commission noted that the Partnership for Public Warning had endorsed the OASIS Common

[60] We note that (1) analog radio broadcast stations, including AM, FM, and low-power FM ("LPFM") stations, (2) analog television broadcast stations, including Class A television ("CA") and low-power TV ("LPTV") stations, (3) analog cable systems, (4) wireless cable systems, which may consist of Broadband Radio Service ("BRS"), or Educational Broadband Service ("EBS") stations, (5) direct broadcast satellite ("DBS") service providers, and (6) SDARS service providers currently are subject to the existing EAS.

[61] *See, e.g.*, PPW 10/27/04 Comments at 3.

[62] *See, e.g.*, EEWN Comments at 2.

[63] *See* CEA Comments at 6-10. CEA states that its Public Alert Technology Alliance, comprised of product manufacturers and government representatives working in a voluntary cooperative venture, adopted voluntary uniform requirements for consumer receivers that display the Public Alert logo and trigger alerts by decoding the entire digital data string (rather than 1050 Hz analog tones) transmitted over NWR broadcasts. *Id.* at 6. CEA states that this type of voluntary activity and flexible standard is more conducive than rigid FCC mandates and rules to maintaining state-of-the-art emergency systems at a time of significant technological change. *Id.* at 7, 11 n.10 (citing *Receiver Performance Specification for Public Alert Receivers* (CEA-2009), approved December 2003) (latest update, CEA-2009-A, was approved and published in March 2005). According to Putkovich, Public Alert™ certified receivers currently are available from three major manufacturers, several others plan to market them, and plans are in progress to incorporate the AlertGuard television technology developed by Thomson (RCA) into HDTV systems for sale in 2007. *See* Putkovich Comments at 8. Merrell states that all Public Alert™ devices incorporate SAME, which allows the device to respond only when an alert matches the specific area(s) the user has chosen for alert coverage, and also provide automatic translation for all alerts into multiple language text. *See* Merrell Comments at 2-5.

[64] *Further Notice,* 20 FCC Rcd at 18652, ¶ 67.

Alerting Protocol (CAP) for this purpose and that many public and private organizations responsible for alerts believed that CAP offered the most practical means of quickly creating an effective interface between emergency managers and multiple emergency alert distribution platforms.[65] Accordingly, the Commission asked whether CAP should be adopted as the common messaging protocol for any future digital alert system, and particularly for EAS alerts.[66] The Commission also asked whether CAP would allow simultaneous distribution to radio, television, and wireless media such as mobile telephones and personal digital assistants (PDAs), and how it would ensure uniformity of alerts across multiple platforms.[67] Currently, the EAS and the NWS utilize the SAME[68] protocol, which introduces special digital codes at the beginning and end of messages. SAME provides information concerning the originator of the alert, the event type, the areas affected, the duration of the alert, the time the alert was issued, and the station's call sign. SAME originally was developed to be transmitted over a radio medium with relatively simple devices receiving the message. For the most part, it performs well for the existing EAS and NWR but does not fully utilize the capabilities inherent in digital transmission.[69]

21. The need for a more robust and flexible protocol that can take full advantage of digital technology has long been recognized. In 2000, the U.S. National Science and Technology Council issued its report, *Effective Disaster Warnings*, concluding that a "standard method should be developed to collect and relay instantaneously and automatically all types of hazard warnings and reports locally, regionally, and nationally for input into a wide variety of dissemination systems."[70] In 2001, more than 130 emergency managers and technologists initiated development of a common alert message standard.[71] In 2003, this work became a part of the OASIS standards process[72] of the Emergency Management Technical Committee.[73] A year

[65] *Id.*

[66] *Id.*

[67] *Id.*

[68] 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) http://www.nws.noaa.gov/directives/010/pd01017012b.pdf.

[69] Use of a more robust and flexible digital protocol should enable EAS Participants to address this concern.

[70] National Science and Technology Council Subcommittee on Disaster Reduction, Effective Disaster Warnings, p. 25 (2000), http://www.sdr.gov/NDIS_rev_Oct27.pdf.

[71] Common Alerting Protocol, v .1.0, oasis-200402-cap-core-1.0, p.3. 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/.

[72] Common Alerting Protocol, v .1.0, oasis-200402-cap-core-1.0, p.3.

[73] The OASIS Emergency Management Technical Committee works on "answering requirements for data exchange among emergency management, public safety, homeland security and related applications and systems." OASIS – Emergency Management TC, http://www.oasis-open.org/committees/emergency/charter.php. Its membership currently includes DHS and the Department of Interior. OASIS Emergency Management TC, http://www.oasis-open.org/committees/membership.php?wg_abbrev=emergency.

later, the Emergency Management Technical Committee released CAP version 1.0, which was revised in 2005 as CAP v. 1.1.[74]

22. CAP is an open, interoperable standard that incorporates a language developed and widely used for web documents.[75] Its standardized alert message format – based on the World Wide Web Consortium's ("W3C's") Extensible Markup Language ("XML")[76] – is a text-based format that facilitates data sharing across different distribution systems. As noted by various commenters, the agreed-upon XML format of CAP can be accepted by a wide variety of devices or systems.[77] The format also permits links to voice, audio or data files, images, and multilingual translations of the alert, and to links providing further information.

23. The CAP standard specifies what fields an alert message can contain and what information can be included in the particular fields. A CAP alert provides fields such as message type, scope, incident, event information, event certainty, sender, geographic scope,[78] and the time when an alert becomes effective and expires.[79] Because CAP has standardized alert elements, commenters assert it will facilitate accurate and meaningful message creation[80] and decrease the

[74] OASIS, Common Alerting Protocol v. 1.1, OASIS Standard CAP-V1.1 Section 1.2 History (October 2005), http://www.oasis-open.org/committees/download.php/15135/emergency-CAPv1.1-Corrected_DOM.pdf.

[75] *See* "Roadmap for Open ICT Ecosystems," Berkman Center for Internet & Society at Harvard Law School, p. 6 (2005); http://cyber.law.harvard.edu/epolicy/roadmap.pdf (defining an "open standard" as one which cannot be controlled by any one entity, evolves in a transparent process, is platform independent, is openly published, is available royalty free or at a minimal cost, and is approved through an open process); *Definition of Open Standards*, Denmark Ministry of Science, National IT and Telecom Agency (June 2004), http://www.oio.dk/files/040622_Definition_of_open_standards.pdf; NASCIO Comments at 3-4 (noting advantages of open standards); Harris 10/28/04 Comments at 4-5 (noting that non-proprietary standards avoid intellectual property issues).

[76] W3C is the international consortium that develops World Wide Web standards. *See* "About W3C" http://www.w3.org/Consortium/. Extensible Markup Language (XML) refers to the extensible markup language that commonly is used for web documents. XML is a simple, very flexible, text format derived from SGML (ISO 8879), and created and maintained by W3C. http://www.w3.org/XML/. XML 1.0 was released in 1998; its predecessor dates back to 1986 (ISO 8879:1986). There is extensive experience and expertise with XML, which has led to multiple other successful XML standards, including RSS, Atom, GML, and AJAX.

[77] CAP is not an Internet Protocol standard. It is a standard that, by design, will work over any feasible transmission medium. *See* Contra Costa 10/29/04 Comments at 10.

[78] CAP also incorporates geospatial elements to permit precise geographic targeting of alerts. For example, if a CAP message is used to provide an alert for an approaching, severe thunderstorm, the message could include the Federal Information Processing Standards ("FIPS") Codes that correspond to the counties and independent cities expected to be affected by the storm. EAS Participants receiving the CAP message would then be able to provide warnings to their customers located within those counties and cities who have customer equipment capable of receiving CAP-formatted transmissions.

[79] CAP Standard, Sec. 3.2. *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.

[80] TFT Comments at 3-10.

potential for operator error.[81] CAP also facilitates interoperability between devices, an attribute essential to establishing an EAS that can operate over multiple platforms.[82]

24. Commenters who addressed the issue generally support the use of CAP as a means for standardizing emergency messages; and no parties indicated that CAP-based messages could not be readily accepted and processed by all EAS Participants.[83] The USGS notes its own experience using CAP, and argues that CAP is an effective content standard that can be applied at interfaces between senders, transmitters, and receivers of alerts covering many of the common natural and man-made hazard situations.[84] USGS concludes that CAP should be mandatory for the EAS.[85] NASCIO also recognizes the flexibility of CAP, noting that 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.[86] CAP also is supported by individuals with hearing and sight disabilities, because it enables equivalent, multiple text and audio messages to be sent concerning the same event to a variety of devices that are accessible to such individuals.[87]

25. We note that CAP also supports capabilities for a digital signature to authenticate the sender and validate the integrity of the text,[88] and an encryption field that enables the encryption of the CAP message. An EAS initiator may encrypt, address, and otherwise secure a CAP alert, thus in part addressing security concerns that arise due to CAP's open text format.[89] Further, CAP uniquely identifies each specific alert. Finally, CAP has been implemented by

[81] PPW 10/25/04 Comments at 21.

[82] PPW 10/25/04 Comments at 21-22.

[83] *See, e.g.*, Airit2me Comments at 4; Entergy Comments at 3 (the Federal government should adopt the CAP standard for use by manufacturers of devices capable of receiving digital signals); FEMA Comments at 3 (FEMA is aware of states' concerns who have invested in their own alert and warning systems, IPAWS is intended to be fully interoperable with those systems using common alerting protocols); NAB Comments at 15-16; Putkovich Comments at 9-10; TDI Comments at 2; TIA Comments at 3; TFT Comments at 10; USGS Comments at 4-5; Wireless RERC Comments at 4; MSTV Reply Comments at 2; NAB Reply Comments at 1; Cellular Emergency Alert Service Association ("CEASA") 10/20/04 Comments at 5; Contra Costa County Community Warning System ("Contra Costa") 10/29/04 Comments at 2; National Association of State Chief Information Officers ("NASCIO") 10/29/04 Comments at 3-4; PPW 10/25/04 Comments at 21; SWN 10/29/04 Comments at 2; Timm (Wisconsin SECC) 10/28/04 Comments at 7 (the current updating of the EAS should keep in mind the incorporation of an alerting protocol such as CAP, which will allow the inclusion of cellular telephone and paging systems into the EAS network).

[84] USGS Comments at 4-5.

[85] *Id.* at 5.

[86] NASCIO 10/29/04 Comments at 3-4

[87] TDI Comments at 2; Wireless RERC Comments at 4.

[88] CAP v. 1.1, Sec. 3.3.2.1.

[89] *See* http://www.oasis-open.org/committees/download.php/15135/emergency-CAPv1.1-Corrected_DOM.pdf (CAP 1.1 Standards document, line 15).

several government agencies including the USGS,[90] NOAA NWS,[91] and the Oregon Amber Alert Program.[92] CAP also has been implemented in the Disaster Management Interoperability Services.[93] Several governmental agencies, including FEMA[94] and NOAA HAZCOLLECT,[95] are testing CAP,[96] and other agencies, such as the Center for Disease Control[97] and the Virginia Department of Transportation,[98] have endorsed it. We note that the U.S. Department of Defense and the U.S. Department of the Interior both voted for the adoption of CAP-V1.1.[99]

26. We conclude that all EAS Participants will be required to accept alerts and warnings in the CAP format should that protocol be adopted by FEMA.[100] This requirement

[90] USGS Earthquake Hazards Program, http://earthquake.usgs.gov/eqcenter/recenteqsww/catalogs/; USGS Volcano Hazards Program, http://volcanoes.usgs.gov/; USGS Landslide Hazards Program: Advisories, http://landslides.usgs.gov/advisories/.

[91] NOAA National Weather Service, http://www.weather.gov/alerts/.

[92] Oregon Amber Alert Program Alert Web Portal FAQs ("It uses the new Department of Justice XML standards and the new Common Alert Protocol.") http://www.oregon.gov/OSP/AMBERALERT/FAQ.shtml.

[93] DMI-Services – Training: Course 6: Lesson 2: Alerts, http://www.dmi-services.org/includes/PhoenixTraining/06_ToolsCourse/06_02_22ToolsCAPAlert_files/frame.htm; DMI-Services: Documentation https://interop.cmiservices.org/documentation.jsp. *See also* Presidential Initiatives: Disaster Management http://www.whitehouse.gov/omb/egov/c-2-2-disaster.html. (The White House website on Presidential Initiatives: Disaster Management states that the Disaster Management Interoperability Services was upgraded to incorporate CAP. As of August 4, 2005, 1400 CAP messages had been transmitted through DMIS. The White House lists as a next step: "assist agencies in deploying the DMIS toolset and in implementing the capability to send and receive alert messages using the CAP standard.").

[94] Statement of Reynold N. Hoover on Public Alert and Warning, Director, Office of National Security Coordination, FEMA, DHS, Before the Subcommittee on Disaster Prevention and Prediction, Committee on Commerce, Science, and Transportation (July 27, 2005), http://commerce.senate.gov/pdf/hoover.pdf ("With that in mind, IPAWS is intended to be fully interoperable with those systems using common alerting protocols."). *See also* FEMA Tests Digital Alert System, FCW (April 11, 2005) http://www.fcw.com/article88522-04-11-05-Print (FEMA test used CAP); Testimony of John M. Lawson, President and CEO, Association of Public Television Stations, Before the Senate Subcommittee on Disaster Prevention and Prediction, Committee on Commerce, Science, and Transportation (July 27, 2005) http://commerce.senate.gov/pdf/lawson.pdf (describing an APTS and FEMA Digital Emergency Alert System Pilot Project that employed CAP).

[95] NOAA HAZCOLLECT, "HazCollect: Speeding Emergency Messages to the Public," (Sept. 30, 2005), http://www.weather.gov/os/hazcollect/resources/HazCollect_Intro_v2005-0930v.2.ppt.

[96] *See also* US Department of Justice, Information Technology Initiatives, Global Justice XML Data Model 3.0.3, http://it.ojp.gov/jxdm/3.0.3/ (referencing CAP).

[97] "PHIN Preparedness: Partner Communications and Alerting Functional Requirements," Center for Disease Control, Version 1.0 (Apr. 2005), http://www.cdc.gov/phin/preparedness/PCA%20_RSv1.0.pdf ("Partners must be able to send cascade communications and alerts using the PHIN specification of the Common Alerting Protocol").

[98] *Id.*

[99] *See* http://www.oasis-open.org/committees/ballot.php?id=839.

[100] *See Executive Order*, sections 2(a)(ii), 3(b)(iii); supra ¶¶ 5-7. By adopting a requirement to accept CAP messages sent by FEMA, we do not intend to conclude or assume that FEMA will adopt the CAP protocol; however, should FEMA adopt the CAP protocol, we find that there is ample evidence in the record to support the CAP requirements set forth herein.

applies to an EAS Participant regardless of whether the participant is utilizing existing EAS or the Next Generation EAS established in this *Order*. Although this requirement requires action by FEMA, we find that adopting it now furthers the prompt development of a state-of-the-art, next-generation national EAS. Significantly, many EAS Participants currently are implementing other revisions to their EAS systems, and they can incorporate CAP into these revisions. Specifically, should FEMA adopt CAP as the common alerting protocol for EAS alerts, EAS Participants must accept CAP-based alerts 180 days after the date that FEMA publishes the applicable technical standards for such CAP alerts.[101] Because most commenters urge the Commission to adopt the CAP format, we find that EAS Participants are already aware that CAP will likely be adopted, and we believe that 180 days will give them adequate time to prepare to receive CAP alerts. EAS Participants have been on notice since November 10, 2005, when the *FNPRM* was issued, that the EAS delivery standards might change. Thus, we find that 180 days will give EAS participants a reasonable period of time in which to implement changes that they should have been expecting for over 18 months since the FNPRM was issued. We further find that 180 days is reasonable in light of the significant public interest, to protect life and property, in implementing next generation EAS systems as soon as possible. We also note that EAS Participants will have the time period between the release of this *Order* and FEMA action for preparation.

[101] *See* 47 C.F.R. § 11.11(a).

3. Authentication and Security

27. In the *2004 NPRM*, the Commission noted that security and encryption were not the primary design criteria when EAS was developed and initially implemented, and that emergency managers were becoming more aware of potential vulnerabilities within the system.[102] The Commission expressed concern that the EAS may be subject to unauthorized access, and that a legitimate EAS signal could be subject to hacking or jamming.[103] Although ENDECs currently have the capability for password protection, it is up to each EAS Participant to implement the safeguard, and there is no means to monitor the extent to which EAS Participants employ passwords.[104] Additionally, when facilities are operating unattended, no one is available on-site to intervene should unauthorized use occur.[105] Accordingly, the Commission sought comment on how to improve the security of EAS distribution methods, information, and equipment and how to ensure the security of any public warning system.[106] It also sought comment on the authentication and verification of EAS alerts.[107] Cox agrees with the FCC that there are legitimate concerns regarding the security of the EAS, and contends that any attacks on EAS or unauthorized use could be devastating. As such, Cox urges the adoption of methods to keep the system secure from intentionally false control or sabotage.[108] Radio stations WTOP(AM), WTOP-FM, and WXTR(AM) (WTOP) contend the security of EAS distribution channels is crucial to the system working properly. WTOP suggests that the security of emergency and test messages can be improved by switching to a system which encrypts messages and guarantees secure delivery with password protection and confirmation of delivery.[109] NAB urges the FCC to coordinate with FEMA and equipment manufacturers to look for technical solutions for ensuring the security of EAS.[110] Contra Costa states that digital technology, particularly the use of the CAP protocol, can protect and verify the security of public warning communication links, and can enable the consistent and comprehensive monitoring of all kinds and levels of warning activity nationwide. Contra Costa states just as the Internet Protocols enable various kinds of computers to work together, CAP can provide the basis for a secure "warning internet" that can leverage all our warning assets to achieve more than any single system can alone.[111]

28. We agree with commenters that all EAS Participants should authenticate the source of, and validate the contents of, EAS alerts. As discussed above, CAP has the capability

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[102] *See 2004 NPRM*, 19 FCC Rcd at 15790-91, ¶ 41.

[103] *Id.*

[104] *Id.*

[105] *Id*.

[106] *Id*. at 15791, ¶ 41.

[107] *Id*.

[108] Cox Comments at 8.

[109] WTOP Comments at 11.

[110] NAB Comments at 14-15.

[111] Contra Costa 10/29/04 Comments at 10.

to allow those who initiate and retransmit EAS alerts to encrypt, authenticate, and validate EAS alerts. We believe that EAS Participants that configure their networks to receive CAP-formatted messages will be able to satisfactorily authenticate and validate EAS alerts in consultation with FEMA. Accordingly, should FEMA adopt CAP as the common alerting protocol for EAS alerts, all EAS Participants must configure their systems to incorporate CAP security functions within 180 days after FEMA publishes the standards for authentication and validation of CAP-formatted alerts.[112] We expect EAS Participants to cooperate with FEMA in its efforts to develop policies, plans, and procedures that meet FEMA's requirements for the new delivery systems and CAP protocol adopted by FEMA.

4. Next Generation Distribution Systems

29. Recent experience demonstrates that natural disasters and terrorist incidents can adversely impact terrestrial telecommunications infrastructure. To achieve the Commission's goals of enhancing the redundancy, reliability and security of EAS, we enable the use of diverse EAS distribution platforms. Our actions today also will ensure that the Secretary of Homeland Security can implement the President's directive to provide "as many communications pathways as practicable" to reach the American people during crises.[113]

30. The development of alternative distribution systems is already underway. For example, we note that the Association of Public Television Stations ("APTS") has proposed a hybrid, satellite/DTV broadcast system that was an integral part of FEMA's Digital Emergency Alert System (DEAS) National Capital Region Pilot.[114] On July 12, 2006, FEMA and APTS

[112] *See* 47 C.F.R. § 11.11(a).

[113] *See Executive Order*, Section 2(a)(iii). Section 3(b)(iii) of the *Executive Order* 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 public alert and warning system."

[114] *Id.* To implement the DEAS, FEMA signed a cooperative agreement with APTS to conduct a Digital Emergency Alert System National Capital Region Pilot Program (DEAS-NCR) to demonstrate how public television's satellite infrastructure can act as a wireless datacasting network to relay alerts to cell phones, the Internet, pagers, and bulletin-board systems. The purpose of the DEAS-NCR was to show that the DTV broadcast stream was sufficiently congestion-free that its bandwidth could support public alert systems as well as closed networks to enable public safety and emergency management agencies to transmit securely critical time-sensitive information. In the pilot, data originating from FEMA was embedded within the PBS broadcast stream and sent over the PBS satellite system to the PBS stations nationwide (as well as to any radio stations, such as Primary Entry Points (PEPs), and other facilities set up to receive the down link). The PBS station, in turn, then would carry the alert within its digital TV signal to personal computers or local area networks equipped with an inexpensive DTV tuner card and a small antenna, that would allow the EAS Participant to decode the alert and then send it to the public. Local broadcasters and cable providers could program their ENDECs to receive a datacast alert, and thus bypass potential points of failure in the existing EAS by interconnecting at a more local level. Although national in scope, the system is scalable to work locally, thereby enabling potentially life-saving, critical information to be disseminated to both rural and urban communities.

In Phase I of the pilot project, DEAS text, voice, and video were broadcast by public television stations, and CAP messages were successfully relayed to cell phones, the Internet, pagers, and electronic bulletin boards. Due to the success of Phase I, DHS extended the pilot program (Phase II) in order to lay the foundation for a national roll-out of a digitally based federal public-safety-alert system. As developed during Phase II, this national deployment is planned to include construction and timeline estimates, technical risk determinations, and other implementation (continued….)

announced the successful completion of Phase II of the DEAS pilot, and that the new DEAS would be operational in the Gulf Coast and Atlantic regions by the end of 2006, and will be deployed nationally by the end of 2007.[115]

31. We agree with commenters that satellite-based alert distribution could be a valuable complement to the existing EAS station-relay distribution method.[116] The vast coverage area of satellite signal footprints would allow immediate alerting of substantial portions of the country with appropriate equipment. Satellite systems also are generally immune from natural disasters and therefore may provide critical redundancy in the event that terrestrial wireline or wireless infrastructure is compromised. We also agree with commenters that Internet-based systems may enhance the resiliency of the EAS distribution network.[117] The Internet is a robust, packet-switched network with intelligent routing,[118] and is designed to provide alternative routes to reach almost all users.[119] Moreover, the Internet is ubiquitous and can enhance the geographic reach of EAS. The open design of the Internet also means that EAS applications can be designed to meet the specific needs of EAS without limitation by the network.

32. We conclude that the distribution architecture of the existing EAS should be enhanced. The record underscores that EAS could be improved by authorizing the delivery of alerts through the existing EAS coupled with new redundant, distribution systems for EAS.[120] We conclude, however, that FEMA is best positioned to determine the types of additional EAS systems that should be accommodated by EAS Participants.[121] We expect that EAS Participants

(Continued from previous page)
options. This system will integrate with the existing national-level EAS system, and according to APTS it could supplement the digital broadcast EAS as a national alert system once fully constructed.

[115] *See* http://www.apts.org/news/dhs_71206.cfm. However, according to a recent project status update, the DHS revised the Gulf Coast and Atlantic region completion to be by the end of summer 2007, and completion of the Pacific and Midwest regions by the end of December 2007.

[116] *See, e.g.*, Cox Comments at 3; APTS Comments at 4-5; State Associations Comments at 10.

[117] SBE Comments at 11. TFT notes that outlying areas, too far from high-power broadcast facilities and on the fringes of satellite footprints, can still avail themselves of the ubiquitous nature of the Internet to originate and receive EAS messages. TFT Comments at 6-7

[118] Definitions of the Internet: 47 U.S.C. § 231(e); Federal Networking Council: Definition of the Internet (1995) http://www.nitrd./gov/fncInternet_res.html.

[119] The Internet is designed to detect obstructions to the network (*i.e.*, congestion, destruction, or other failures), determine alternative routes, and deliver data with a high degree of success.

[120] *See, e.g.*, Sage Alerting Systems ENDEC Developers 10/28/04 Comments at 3 (compatibility with the existing EAS/WRSAME standards should be maintained and dissemination should be broadened beyond radio, TV and cable channels to include cell phones, satellite TV, digital radio, DARS, HDTV channels, and any medium which can reach the public); FEMA Comments at 2 (delivery of EAS messages should expand beyond the current universe of analog radio, TV, and cable); The National Center for Missing & Exploited Children 10/29/04 Comments at 1 (supports enhancing the EAS to deliver urgent messages to all possible information pathways during crises so that damage to property is limited and lives are saved); Maine State Emergency Communications Committee 10/29/04 Comments at 2 (recent technological advances, microwave, satellite, and other alternative delivery methods, can make the EAS system more effective); North Carolina State Emergency Communications Committee 10/29/04 Comments at 1, 4-5 (emergency managers should extend delivery into other mediums in parallel to the current system).

[121] *See Executive Order*, sections 2(a)(ii), 3(b)(iii); supra ¶¶ 5-7.

will collaborate closely with FEMA and other governmental entities to fully implement such requirements. Accordingly, 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.[122]

[122] *See* 47 C.F.R. § 11.11(a).

B. CAP and Next Generation EAS: Better Serving the Needs of Persons with Disabilities and Non-English Speakers

1. Background

33. *Serving the needs of persons with disabilities.* The Commission's EAS rules currently require that EAS provide visual and aural messages.[123] Under the rules, a visual EAS alert does not have to be an exact transcription of an audio alert, but must be "any method of visual presentation which results in a legible message conveying the essential emergency information."[124] In the *Further Notice*, the Commission sought comment on how it could make EAS alerts more accessible to persons with disabilities.[125] The Commission sought comment on whether to require all video programming distributors subject to Part 11 to provide the same information in both the visual and audio versions of EAS messages, instead of only the header code information that EAS Participants now provide visually.[126]

34. A number of commenters suggest that the audio and visual formats are equally important and should contain the same information, especially for persons with disabilities.[127] Service providers, however, request that the Commission not require video programming distributors to provide the same information for visual and aural versions of emergency messages, unless the digital message received by the station includes sufficient information to generate an aural and visual message automatically.[128] These commenters argue that it would be technically and economically infeasible for a broadcaster or other EAS Participant to provide an accurate simultaneous transcription of an audio EAS alert.[129] A number of commenters noted that CAP-formatted alerts could provide the same alert in text, aural, and video formats, and multiple languages, thus providing broad access to the public.[130]

35. *Serving the non-English speaking community.* In the *Further Notice*, the Commission sought comment on the issues raised in a September 20, 2005 Petition for

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[123] 47 C.F.R. § 11.51. The rules require that the national message crawl be displayed at the top of the television screen, where it will not interfere with other messages. 47 C.F.R. § 11.51(d).

[124] 47 C.F.R. § 73.1250(h).

[125] *Further Notice,* 20 FCC Rcd at 18654, ¶ 74.

[126] In many cases, descriptive information will be contained in the voice message, but the text-crawl contains only basic facts.

[127] *See, e.g.,* AFB Comments at 3; MSTV Comments at 10-11; SBE Comments at 23-25; TDI Comments at 6-7; WGBH Comments at 8-9; MSTV Reply Comments at 7; TDI Reply Comments at 7; Maine SECC 10/29/04 Comments at 2; Timm 10/28/04 Comments at 6.

[128] CBA Comments at 3; NAB Comments at 10-11.

[129] *See, e.g.,* CBA Comments at 3 (very few stations have the resources to transcribe accurately and in real time); NAB Comments at 7-13.

[130] Airit2me Comments at 5; AFB Comments at 2-3; SBE Comments at 25; TIA 10/29/04 Comments at 3; TFT Comments at 8-11; WBGH Comments at 9-10. RadioShack observes that it and many other manufacturers make products that include connections to activate flashing lights and bed shaking devices for persons with hearing disabilities and voice activation for the blind. RadioShack Comments at 9; *see also* Putkovich Comments at 21.

Immediate Interim Relief filed by the Independent Spanish Broadcasters Association, *et al*.[131] The Petitioners requested that the Commission significantly revise our EAS rules by expanding the system to provide for multilingual EAS messages.[132]

2. Discussion

36. *Serving the needs of persons with disabilities.* President Bush's Executive Order mandates that the Secretary of Homeland Security "include in the public alert and warning system the capability to alert and warn all Americans, including those with disabilities and those without an understanding of the English language."[133] We believe that CAP could provide an important tool for helping to accomplish this goal.

37. CAP should facilitate the provision of functionally equivalent EAS alerts and warnings to persons with disabilities.[134] Using CAP, the original format of warning messages could be converted into various formats, including text, video, and audio.[135] Critical information graphically portrayed, scrolled, or crawled on the screen also could be accompanied by an audio

[131] "Petition for Immediate Interim Relief," filed Sept. 20, 2005 by the Independent Spanish Broadcasters Association, the Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council. On October 14, 2005, NAB filed an opposition to the petition.

[132] The Petitioners requested the following:

- Revise section 11.14 to provide that all NP stations air Presidential messages in both English and Spanish. LP-1 stations monitoring the NP stations, and local stations monitoring the LP-1 stations would also air the message in English and Spanish.
- Revise section 11.18(b) to include a Local Primary Spanish ("LP-S") designation, and have an LP-S station in each area where an LP-1 station has been designated, in each radio market with a Latino population of 50,000 or 5 percent of the total market population. The LP-S station would monitor and rebroadcast Presidential messages and serve as the entry point for state and local authorities and the NWS to distribute emergency information in Spanish.
- Revise section 11.18(b) to include a Local Primary Multilingual ("LP-M") designation in areas with a population of a language minority (not Spanish) of either 50,000 or 5 percent of the total market population.
- Revise section 11.52(d) to provide that at least one broadcast station in each market would monitor and rebroadcast emergency information carried by LP-S and LP-M stations.
- Revise section 11.52(d) to provide that if during an emergency a local LP-S or LP-M station loses its transmission capability, stations remaining on the air should broadcast emergency information in the specified language or languages (in at least part of their broadcasts) until the affected LP-S or LP-M station is on the air.
- The Commission should encourage all broadcasters to assist the LP-S or LP-M stations damaged during an emergency to return to the air as soon as possible.

[133] *Executive Order*, section 2(a)(iv).

[134] *See* TIA 10/29/04 Comments at 3; SBE Comments at 13, 21-22; TDI Reply Comments at 5; LogicaCMG 10/29/04 Comments at 16; WGBH Comments at 9; Wireless RERC Comments at 4.

[135] RadioShack observes that it and many other manufacturers make products that include connections to activate flashing lights and bed shaking devices for persons with hearing disabilities and voice activation for the blind. RadioShack Comments at 9; *see also* Putkovich Comments at 21; NAB Comments at 6; WGBH Comments at 9-10.

description.[136] Persons with hearing disabilities would be able to read the entire emergency message instead of a brief summary. Audio and visual formats are both important and could contain the same information.[137] Moreover, a CAP-formatted message could be converted to synthesized speech, as is done by NWS weather alerts, for visually impaired persons.[138] Accordingly, in this *Order*, we promote the delivery of audio, video, and text messages to persons with disabilities by requiring EAS Participants to accept CAP-formatted alerts and warnings, should CAP be adopted by FEMA.

38. While CAP is promising, however, it may not be the whole answer for making EAS alerts accessible to persons with disabilities, and it does not address the broader question of making emergency and public safety information available to persons with disabilities. For example, Section 79.2 of the Commission's rules requires video programming distributors[139] to make the audio portion of emergency information accessible to persons with hearing disabilities using closed captioning or other methods of visual presentation.[140] Video programming distributors also must ensure that emergency information provided in the video portion of a regularly scheduled newscast, or a newscast that interrupts regular programming, is accessible to persons with visual disabilities through aural description in the main audio, such as open video description.[141] Emergency information is defined as information about a current emergency that

[136] AFB Comments at 2-3; SBE Comments at 22-25.

[137] SBE Comments at 25; TDI Comments at 6; WGBH Comments at 9-10; MSTV Reply Comments at 7; TDI Reply Comments at 7.

[138] SBE Comments at 22; Dodds Comments at 2; WGBH Comments at 11.

[139] *See* 47 C.F.R. § 79.1(a)(2) (defining "video programming distributors," as "[a]ny television broadcast station licensed by the Commission and any multichannel video programming distributor as defined in § 76.1000(e) of this chapter, and any other distributor of video programming for residential reception that delivers such programming directly to the home and is subject to the jurisdiction of the Commission"); *see also* 47 C.F.R. § 76.1000(e) (defining "multichannel video programming distributor" as "an entity engaged in the business of making available for purchase, by subscribers or customers, multiple channels of video programming. Such entities include, but are not limited to, a cable operator, a multichannel multipoint distribution service, a direct broadcast satellite service, a television receive-only satellite program distributor, and a satellite master antenna television system operator, as well as buying groups or agents of all such entities").

[140] 47 C.F.R. § 79.2(b)(1)(i); *see also* 47 C.F.R. § 79.1(a)(4) (defining closed captioning as the "visual display of the audio portion of video programming"); *Obligation of Video Programming Distributors To Make Emergency Information Accessible To Persons with Hearing Disabilities Using Closed Captioning,* Public Notice, DA 06-2627 (Dec. 29, 2006) (addressing obligations of video programming distributors to make emergency information accessible in light of the 100% closed captioning requirement).

[141] 47 C.F.R. § 79.2(b)(1)(ii). Section 713 of the Act defines "video description" as "the insertion of audio narrated descriptions of a television program's key visual elements into natural pauses between the program's dialogue." 47 U.S.C. § 613(g). Video programming distributors may use this definition as guidance in meeting the requirements of section 79.2(b)(1)(ii). *See* 47 C.F.R. § 79.2(b)(1)(ii). For example, if a map is displayed on the screen, the video programming distributor must provide an aural description of the geographic location encompassed by the map and any areas highlighted on the map in order to make the information accessible to persons with visual disabilities. In addition, emergency information provided in the video portion of programming that is not a regularly scheduled newscast, or a newscast that interrupts regular programming, such as a "crawl" or "scroll," must be accompanied by an aural tone to alert persons with vision disabilities that they should tune to another source, such as a radio, for more information. *See* 47 C.F.R. § 79.2(b)(1)(iii).

is intended to further the protection of life, health, safety, and property, *i.e.* critical details regarding the emergency and how to respond to the emergency.[142]

39. We are issuing a *Further Notice of Proposed Rulemaking* to re-examine the best way to make EAS and other emergency information accessible to persons with disabilities. We will invite comment on: (1) presentation of the audio feed in text format, and vice-versa; (2) making emergency information available to various devices commonly used by persons with disabilities; and (3) providing emergency messages in multiple formats to meet the needs of persons with disabilities.

40. *Serving non-English Speakers*. We also affirm our commitment that non-English speakers should have access to EAS alerts as soon as the simultaneous transmission of multilingual messages is practicable.[143] We believe that the first step toward more effectively serving non-English speakers, consistent with the Secretary of Homeland Security's responsibility to enable alerting of "those without an understanding of the English language"[144] is to require the use of CAP, conditional on its adoption by FEMA. Requiring EAS Participants to be able to receive CAP-formatted alerts will facilitate more accurate and detailed multilingual alerts. At the same time, we also expect that EAS participants will simultaneously transmit multilingual CAP-formatted messages by EAS Participants as soon as such transmission is practicable. For example, this could happen either as a result of the development of comprehensive, nation-wide Next Generation EAS under FEMA's auspices, or pursuant to the earlier development of CAP-based transmission systems at the state level per coordination between state planners and FEMA. This requirement will ensure that the initiator of any EAS alert has the technological capability to deliver simultaneously messages in English and any other language determined to be appropriate for a given alert.

41. The Rules we adopt today provide the groundwork for transmission of multilingual EAS alerts and warnings. CAP, however, may not be a complete answer for making EAS alerts available to non-English speakers, and is not a comprehensive solution for making general emergency and public safety information available to non-English speakers. Indeed, we believe that Petitioners' request is broader than the formal EAS structure and raises important questions about the availability of emergency information to the non-English speaking audience. We initiate today a Further Notice to seek additional comment on these proposals. Although we hope that the stakeholders will work together, under our auspices, to reach a resolution prior to

[142] Emergency situations in which the broadcasting of information is considered as furthering the safety of life and property include, but are not limited to, the following: tornadoes, hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread fires, discharge of toxic gasses, widespread power failures, industrial explosions, civil disorders, school closings and changes in school bus schedules resulting from such conditions, and warnings and watches of impending changes in weather. *See* 47 C.F.R. §§ 73.1250(a), 79.2(a)(2).

[143] Commenters recognize that EAS alerts must be available to non-English speaking people as well as people with visual or hearing disabilities. *See, e.g.*, AFB Comments at 3-4; State Associations Comments at 15-17; T-Mobile Comments at 17-18; Maine SECC 10/29/04 Comments at 2; SWN 10/29/04 Comments at 2; TDI 10/24/04 Comments at 4.

[144] *Executive Order*, section 2(a)(iv).

the conclusion of our proceeding on these issues, we are prepared to issue an order addressing these issues within six months.[145]

42. In order to begin focusing on these issues quickly, we direct the Public Safety and Homeland Security Bureau to convene a discussion (or a series of discussions) at the Commission among stakeholders as soon as possible, and to place a report describing the results in the public docket within 30 days of release of this Order.

C. Expanding the Base of EAS Participants

1. Wireline Video Participation in EAS

a. Background

43. Under the Commission's current EAS rules, wireline common carriers are not required to participate in EAS. In the *Further Notice*, the Commission noted that some traditional telephone companies have indicated that they intend to compete with cable television service and DBS providers in bringing multichannel video programming service to customers' homes through fiber optic connections.[146] The Commission sought comment on whether Wireline Video Providers should have public alert and warning responsibilities similar to those of other providers subject to the EAS rules, if there are particular attributes of wireline technology that would make it easier (or more difficult) to deliver alerts and warnings to the public, and whether there are policy considerations the Commission should consider regarding requiring Wireline Video Providers to provide alerts and warnings.[147]

b. Comments

44. Most commenters, including Wireline Video Providers, agree that Wireline Video Providers should be subject to the same EAS obligations as other multichannel video programming distributors (MVPDs).[148] These commenters agree that it will be important to ensure that all consumers receive the benefits and protections of EAS, regardless of the technology used to deliver the video services. They also argue that because many consumers will likely use television programming services offered by Wireline Video Providers, the Commission should require such offers to be EAS-compliant to ensure that the greatest possible number of consumers is alerted in the case of an emergency.

45. Verizon states that its FiOS service already complies with the EAS obligations that apply to cable operators.[149] AT&T asserts that it will "participate in the EAS" whether or not

[145] *See also, infra,* n. 230.

[146] *Further Notice*, 20 FCC Rcd at 18653, ¶ 70.

[147] *Id.*

[148] Verizon Comments at 2 (EAS should apply to any broadcast video services carried over FTTP and other advanced broadband networks); Letter to Marlene H. Dortch, Secretary, FCC, from Glenn Reynolds, Vice President-Regulatory, BellSouth, at 2 (filed April 20, 2006) ("BellSouth is fully supportive… of applying equivalent EAS obligations on all multi-channel video providers, regardless of the platform used."); BellSouth Reply Comments at 4); NCTA Comments at 8-11 (telephone companies providing video services should be subject to the EAS rules applicable to cable operators); TDI Reply Comments at 6 (telco-delivered video and multi-channel video service providers should have the same EAS obligations).

[149] Verizon Comments at 2.

Commission rules mandate it.[150] AT&T argues, however, that only a limited set of EAS system receivers provide alert information in an IP format and that video vendors are not technically capable of routing EAS messages to the correct end user. AT&T states that it is developing an IPTV-specific EAS solution for non-broadcast channels, and is working on an interface between EAS equipment and IPTV middleware.[151] Thus, it requests that no deadlines for non-cable-operator EAS compliance be set before June 30, 2008, and that rules do not "unduly restrict" how IP service providers distribute and display information.[152]

c. Discussion

46. We agree with commenters that Wireline Video Providers should be considered Participants under our EAS rules. The EAS plays a critical role in providing vital public safety information. The long-term resilience of the EAS could be significantly increased by careful implementation that could better accommodate, and even harness, the innate flexibility of IP-based networks that can route around damaged nodes. Moreover, a viewer's reasonable expectation regarding the availability of alerts over television programming is identical, whether the programming is over-the-air broadcasting, cable, DBS, or a new wireline video service. By adopting a technologically neutral EAS obligation today, the Commission is enabling these emerging service providers to integrate EAS at an early developmental stage.

47. Under section 624(g) of the Act and the Commission's EAS regulations, providers of "cable systems" must participate in EAS.[153] Section 624(g) of the Act provides that "each cable operator shall comply with such standards as the Commission shall prescribe to ensure that viewers of video programming on cable systems are afforded the same emergency information as is afforded by the emergency broadcasting system pursuant to Commission regulations in subpart G of part 73, title 47, Code of Federal Regulations."[154] The Commission imposed EAS regulations on cable operators pursuant to this mandate in 1994, concluding that cable "is invaluable in the dissemination of information during emergencies."[155] The term "cable operator" means a person "who provides cable service over a cable system,"[156] including "a facility of a common carrier which is subject, in whole or in part, to the provisions of title II of this Act … to the extent such facility is used in the transmission of video programming directly to subscribers, unless the extent of such use is solely to provide interactive on-demand

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[150] AT&T Comments at 2-4.

[151] *Id.* at 5-6. For local broadcasts, AT&T states that it will "pass through" all EAS alerts (local and national) provided by local broadcast channel feeds. AT&T also states it would pass through national alerts transmitted by cable services, but argues that layering EAS alerts on top of local broadcast feeds likely would obscure or interfere with the information being provided.

[152] *Id*. at 6; Letter to Marlene H. Dortch, Secretary, FCC, from Thomas J. Hughes, Vice President-Federal Regulatory, AT&T Services Inc. (filed April 6, 2007) (AT&T April 6, 2007 Letter).

[153] 47 U.S.C. § 544(g).

[154] *Id*.

[155] *1994 Report and Order*, 10 FCC Rcd at 1806, ¶ 57.

[156] 47 U.S.C. § 522(5); *see id.* at §§ 522(6) (defining a "cable service" as "the one-way transmission to subscribers of … video programming … and subscriber interaction, if any, which is required for the selection or use of such video programming …"), 522(7) (defining a "cable system" as "a facility … designed to provide cable service").

services."[157] Thus, section 624(g) expressly authorizes the imposition of EAS requirements on Wireline Video Providers to the extent that they qualify as "cable operators" under the Act.

48. To the extent that Wireline Video Providers do not qualify as "cable operators" under the Act, we require that they participate in EAS pursuant to our Title I ancillary jurisdiction and in connection with our specific responsibilities under sections 624(g) and 706.[158] As a general matter, the Commission has discretion to use ancillary jurisdiction when the Commission has Title I subject matter jurisdiction over the service and the assertion of jurisdiction is "reasonably ancillary to the effective performance of [its] various responsibilities."[159] Wireline Video Providers fall within the scope of the Commission's jurisdiction because they provide "interstate . . . communication by wire."[160] At least some of their services involve transmission across state lines, meeting the definition of "interstate communication,"[161] and they are "wire communication," which is "transmission of . . . pictures . . . and sounds . . . by aid of wire, cable, or other like connection."[162] Thus, the Commission has subject matter jurisdiction over these services. We also find that imposing an EAS requirement is reasonably ancillary to the effective performance of our responsibilities.[163] Wireline Video Providers' participation in the EAS will advance the animating purpose of section 624(g) by ensuring that their video subscribers have access to the same emergency information as broadcast and cable television viewers.[164] Indeed, we believe that their EAS participation is necessary to preserve and advance the goals of section 624(g), as Wireline Video Providers offer competitive alternatives to the video programming available through broadcast and cable television, and are likely to reach increasingly large portions of the American public as they deploy their services.[165] Moreover, requiring Wireline Video Providers to participate in EAS also will further our core public safety mission under Title I, which requires us to take steps to "promot[e] safety of life and property,"[166] and section 706, and is consistent with prior Commission actions. Accordingly, we conclude that we have ancillary jurisdiction to require even those Wireline Video Providers that may not be cable operators under the Act to participate in EAS.

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[157] *Id.* at § 522(7)(C)*; see id.* at § 153(10) (defining common carrier).

[158] 47 U.S.C. §§ 151, 152(a), 154(i), 154(o), 544(g), 606.

[159] *See United States v. Southwestern Cable Co.*, 392 U.S. 157, 178 (1968); *IP-Enabled Services*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10261,¶ 27 & n.87 (2005) (*VoIP 911 Order*) (citing additional precedent and authority).

[160] 47 U.S.C. § 152(a).

[161] 47 U.S.C. § 153(22).

[162] 47 U.S.C. § 153(52).

[163] *See VoIP 911 Order*, 20 FCC Rcd at 10262, ¶ 29.

[164] *See* 47 U.S.C. § 544(g); U.S. v. Midwest Video Corp., 406 U.S. 649, 667-68 (1972) (cable regulation was reasonably ancillary to the Commission's statutory responsibilities where it would "further the achievement of long-established regulatory goals in the field of television broadcasting").

[165] *See 1994 Report and Order*, 10 FCC Rcd at 1806, ¶ 57 (imposing EAS obligations on cable systems because cable had become an "invaluable link in the dissemination of information during emergencies" in light of their high penetration levels).

[166] 47 U.S.C. § 151.

49. As a policy matter, we believe that the reasonable expectations of viewers should guide our efforts to encourage the development of a more comprehensive EAS system. We reaffirm that our long-term goal is to incorporate as many communications technologies as possible into a comprehensive, flexible, and redundant system to deliver EAS alerts quickly to the largest number of consumers.

50. Wireline Video Providers should be subject to the same EAS requirements as providers of Digital Cable Systems.[167] We therefore amend our EAS rules to specifically include Wireline Video Providers. Wireline Video Providers are EAS Participants, however, only to the extent they provide video services; our EAS rules do not impose mandatory EAS obligations on wireline telephone companies providing traditional landline telephone services at this time.[168]

2. Wireless Participation in EAS

a. Background

51. In the *Further Notice*, the Commission noted that wireless devices are used to reach the American public quickly and efficiently.[169] The Commission specifically noted the participation of the wireless industry in FEMA's DEAS pilot projects and asked what further steps it should take to facilitate wireless provision of EAS alerts, including whether to require wireless carriers to provide emergency alerts.[170] It also noted that commenters to the *2004 NPRM* had identified technologies that would enable wireless handsets to receive EAS alerts and requested comment on these and other approaches to wireless alert and warning.[171] The Commission directed commenters to address the extent to which each approach would permit the use of a common messaging protocol and whether handsets would have to be replaced. Numerous parties responded to these and related questions specified in the *Further Notice*, resulting in a well-developed record.

b. Discussion

52. As discussed in paragraph 8 above, on October 13, 2006, the President signed the WARN Act into law. Because the WARN Act directs the Commission to initiate a rulemaking regarding the establishment of an alerting system for commercial mobile service (CMS) providers that voluntarily elect to transmit emergency alerts, and the schedule set by the WARN

[167] 47 C.F.R. § 11.51(p)(1)-(3).

[168] The current wireline voice networks are not suited for EAS. Verizon Comments at 3 ("Data and voice services are point-to-point or circuit-switched services that, by their very nature, are not well situated for broadcasting emergency notifications on a wide scale."); *see also* Letter to Marlene H. Dortch, Secretary, FCC, from Paul Brigner, Executive Director, Verizon Regulatory, Attachment at 4 (filed Aug. 9, 2006) (PSTN is engineered to facilitate a "[c]ommunication path … between specific nodes," "to include concentration, but avoid blockage," and "to handle typical peaks in traffic (e.g., Mother's Day)," and is "[s]ubject to overload and failure under extreme calling volumes.").

[169] *Further Notice*, 20 FCC Rcd at 18653, ¶ 69.

[170] *Id.*

[171] *Id*. Participating wireless industry organizations included Cingular, Sprint Nextel, T-Mobile, Verizon Wireless, CTIA, and USA Mobility, among others.

Act precludes initiation of such rulemaking until a later date, we do not address commercial wireless carrier participation in EAS in this *Order*.

D. State-Level and Geographically Targeted EAS Alerts

1. Background

53. EAS Participants currently have the discretion whether to receive and retransmit alerts from state and local EAS entities,[172] and we applaud the numerous entities that have chosen to serve the public by voluntarily participating in state and local EAS activations.[173] In the *Further Notice*, the Commission acknowledged the essential role that state and local governments play in providing emergency information to the public,[174] and specifically noted the close nexus between state and local alerting and federal efforts to provide disaster relief. The Commission observed that the public interest may be served by affording state governors the ability to disseminate emergency information via EAS facilities, and sought comment on whether EAS Participants should be required to transmit EAS messages delivered by the governor of any state in which they provide service.[175]

54. As many commenters have noted, nearly all emergencies affect regional, state or smaller areas.[176] Although EAS is frequently used to provide the public vital localized weather-related announcements (such as tornado warnings), it generally has not been used by states to formally provide the public state-wide EAS alerts regarding emergencies such as natural disasters or terrorism incidents. For example, during Hurricanes Katrina, Wilma, and Rita, broadcasters provided localized emergency information to the public, while none of the affected state governors formally activated EAS to provide the public evacuation, shelter or other critical information.[177] We believe that, consistent with the Commission's fundamental mandate to promote the safety of life and property through the use of wire and radio communications,[178] we should go further to encourage and facilitate state use of the EAS network.

2. Discussion

a. Receipt of State-Level Messages

55. We believe that voluntary participation by cable and broadcast EAS Participants in accommodating state and local level alerting in the existing EAS has been generally successful. Nevertheless, we conclude there are compelling policy reasons to order EAS Participants to receive CAP-formatted EAS alerts activated by state governors or their designees.

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[172] *See* 47 C.F.R. § 11.41(b)(2).

[173] If any entity chooses to participate in state and local EAS activations, it must comply with the Commission's Part 11 EAS rules.

[174] *Further Notice*, 20 FCC Rcd at 18654, ¶ 73.

[175] *Id.* The Commission also asked whether, if it were to require carriage of state-level alerts, it should adopt an additional originator code for state governors in section 11.31(d) of the Commission's rules. *Id.*

[176] To date, the EAS has not been used to deliver a Presidential message to the American public.

[177] *Hurricane Katrina NPRM* at Appendix B, Report and Recommendations to the Federal Communications Commission, p. 28.

[178] 47 U.S.C. § 151.

First, we again note that EAS use to date has been overwhelmingly related to weather and state and local alerts.[179] We also believe that states will be more inclined to deploy the necessary resources to upgrade to Next Generation EAS, including the ability to simultaneously transmit multiple and differentiated CAP-formatted messages, if the states have a particular – and FCC-enforceable – stake in the EAS during state and local emergencies. We conclude, therefore, that all EAS Participants within a state[180] are required to be prepared to receive state-level messages delivered to the participant by the state's governor (or the governor's designee) within 180 days from the date FEMA adopts CAP, so long as such delivery is explicitly described in a state EAS plan that is submitted to and approved by the Commission. In addition, we believe that other public officials may, in appropriate circumstances, activate EAS alerts. We seek comment in the attached Further Notice about which officials should be permitted to activate EAS alerts and under what circumstances.

56. We recognize 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. Accordingly, we will 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.[181] We find 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. "[P]romoting safety of life and property through the use of wire and radio communication" is a core mission of the FCC under Title I,[182] Title III authorizes the FCC to grant radio licenses in the public interest,[183] and the Commission is authorized to "make such rules and regulations . . . as may be necessary in the execution of its functions," and to "[m]ake such rules and regulations . . . not inconsistent with law, as may be necessary to carry out the provisions of this Act . . . "[184] Developing and maintaining an effective, reliable, integrated, flexible, and comprehensive EAS system is a fundamental and longstanding FCC mission under the Communications Act.

57. Requiring EAS Participants to receive state-level alerts delivered pursuant to, and upon adoption by FEMA of CAP advances the Commission's policy objectives and serves the public interest by ensuring the ability of state governors to disseminate emergency information

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[179] *See* supra ¶ 14 n. 58.

[180] As explained below, this requirement does not apply to SDARs and DBS providers.

[181] 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 will also have this capability. *Accord* 47 U.S.C. § 153(40) ("the term "state" includes the District of Columbia and the Territories and possessions").

[182] 47 U.S.C. § 151.

[183] *Id.* at §§ 301, 307(a), 309(a).

[184] *Id.* at §§ 154(i), 303(r). *See also id.* at § 154(o) (requiring the Commission, "[f]or the purpose of obtaining maximum effectiveness from the use of radio and wire communications in connection with safety of life and property," to study "methods of obtaining the cooperation and coordination of these systems.").

via EAS facilities. State governments play an essential role in providing emergency information to the public. The Commission's EAS regulations always have accounted for the importance of state-level alerts, but we now conclude that mandating receipt of state-level EAS messages will further our core public safety mission.

58. Exercising ancillary jurisdiction to require EAS participants to receive messages delivered to them by a state governor also furthers other statutory goals. Section 615 requires the Commission to "encourage and support efforts by States to deploy comprehensive end-to-end emergency communications infrastructure and programs,"[185] while Section 706 grants specific, communications-related powers to the President in time of war or national emergency. In such event, the President may, for example, take control of, or suspend or amend the rules and regulations applicable to, any or all cable and radio and television broadcast stations within the Commission's jurisdiction. Commission authority to regulate participation by cable systems in the emergency alerting process stems primarily from section 624(g) of the Act.[186] That provision requires the Commission to ensure that cable viewers are afforded the same access to emergency communications as broadcast viewers and listeners. Additionally, the Americans with Disabilities Act strives to make all facets of our society fully accessible to individuals with disabilities.[187] Finally, in light of the President's 2006 *Executive Order*, which 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 public alert and warning system, we note that our action today is consistent with that Presidential directive as well as with emergency preparedness goals expressed by Congress in other statutes.[188]

59. Accordingly, we reject as without merit NAB's argument that the Commission lacks authority to mandate participation in state-level EAS alerts. NAB points out that section 706 concerns Presidential communications, and the executive orders delegating authority to the FCC pursuant to section 706 largely concern the development of a national-level communications capability to serve Presidential needs, rather than state or local needs.[189] Section 706 is not the only source of FCC authority to impose EAS requirements, however. The Commission's core public safety mission under Title I is not limited to national emergencies,[190]

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[185] 47 U.S.C. § 615 (support for universal emergency telephone number). While generally supporting our subject matter jurisdiction in this area, we acknowledge that "nothing in this section shall be construed to authorize or require the Commission to impose obligations or costs on any person." *Id.*

[186] 47 U.S.C. § 544(g).

[187] *See also Individuals with Disabilities in Emergency Preparedness*, Exec. Order No. 13347, 69 Fed. Reg. 44,573 (2004).

[188] "The Congress recognizes that the organizational structure established jointly by the Federal Government and the States and their political subdivisions for emergency preparedness purposes can be effectively utilized to provide relief and assistance to people in areas of the United States struck by a hazard. The Federal Government shall provide necessary direction, coordination, and guidance, and shall provide necessary assistance, as authorized in this subchapter so that a comprehensive emergency preparedness system exists for all hazards." 42 USCA § 5195 (Declaration of Policy).

[189] *See* Joint Comments of the National Association of Broadcasters and the Association for Maximum Television Service, Inc. in EB Docket No. 04-296 at 25-27 (filed Oct. 29, 2004) (NAB Comments).

[190] *See* 47 U.S.C. § 152(a) (establishing the Commission to regulate interstate and foreign communications for the purpose of "promoting safety of life and property through the use of wire and radio communication").

nor is our Title III authority to grant radio licenses in the public interest so limited.[191] Indeed, the *Executive Order* broadly affirms 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 … , *taking appropriate account of … all levels of government in our Federal system …*"[192] We could not ensure a "comprehensive" system without taking state governments into account. The FCC's past reliance on voluntary state-level EAS participation reflects a policy judgment, rather than a lack of authority, as NAB suggests.

60. NAB also argues that the Commission cannot rely on section 1 because requiring state-level EAS participation implicates programming content. The only support that NAB offers for this argument is the D.C. Circuit's statement in *Motion Picture Ass'n of America, Inc. v. FCC* that "[o]ne of the reasons why § 1 has not been construed to allow the FCC to regulate programming content is because such regulations invariably raise First Amendment issues."[193] NAB's reliance on this statement is misplaced. In the *MPAA* decision, the Commission was relying on Title I alone to regulate programming content in the face of a statutory provision regarding video descriptions that the court interpreted as limiting FCC authority.[194] Here, in contrast, we rely on Title III as well as Title I to mandate the carriage of emergency information. Requiring the carriage of emergency information also is a longstanding function of the Commission. NAB fails to explain how requiring state-level EAS participation implicates programming content in a manner different from the longstanding requirement of national-level EAS participation, which NAB does not challenge.

61. In addition to the source of our legal authority to require participation in state-level EAS, we also must consider the facilities and architecture of the various EAS Participants in determining how best to implement a state-level EAS requirement. We note that the existing EAS network architecture is based on a broadcast model of localized receipt and distribution by radio, television, and cable service providers using ENDEC units situated throughout their service areas. We recognize that certain other EAS Participants may have organized their service infrastructure on a national, not regional, basis. For example, the Commission recognized in the *First Report and Order* that SDARS "is by nature a national service and that as a result the development of methods to ensure receipt of state and local alerts by SDARS licensees is likely to be challenging."[195] Requiring these carriers to establish monitoring capability in every state

[191] *Id.* at §§ 301, 307(a), 309(a).

[192] *Executive Order*, section 1 (emphasis added).

[193] *Motion Picture Ass'n of America, Inc. v. FCC*, 309 F.3d 796, 805 (D.C. Cir. 2002) (*MPAA*). NAB erroneously attributes this quote to the Supreme Court in *Turner Broadcasting System, Inc. v. FCC*, 512 U.S. 622, 651 (1994). *See* NAB Comments at 30.

[194] *See MPAA*, 309 F.3d at 804 ("Section 1 does not address the *content* of the programs with which accessibility is to be ensured."). NAB's contention that mandating state-level EAS participation contravenes section 4(o) of the Act is specious. NAB Comments at 29. Whereas the *MPAA* decision on which NAB relies concerned section 713 of the Act, which Congress had recently adopted and which the Court interpreted as withholding authority under title I, section 4 of the Act enumerates various functions of the agency and has long co-existed with the FCC's regulatory authority over EAS. *See* NAB Comments at 28, citing *MPAA*, 309 F.3d at 807 (concurring opinion of Henderson, J.).

[195] *First Report and Order*, 20 FCC Rcd at 18643-44, ¶ 46.

where they do business could prove to be unduly burdensome. Satellite carriers, in particular, have expressed a need for a single receive point for EAS alerts that would complement their organizational structure.

62. We do not require SDARs and DBS providers to accommodate state-level alerts given the national nature of their broadcast area. We note that SDARS and DBS cannot accommodate state-level alerts at present and might not be able to do so even after the full implementation of Next Generation EAS. In the United States, there are two licensed SDARS operators: Sirius Satellite Radio, Inc. ("Sirius") and XM Radio, Inc. ("XM").[196] Both licensees transmit their programming via satellite directly to subscribers' receivers on a nationwide basis.[197] In the *First Report and Order*, the Commission required the SDARS licensees to transmit national level EAS messages on all channels on their systems.[198] In the *Further Notice*, the Commission sought comment on how technologies like SDARS, which are designed to receive and deliver national programming, could deliver state and local alerts.[199] Although some potential, developing functionalities may enable SDARS to support geo-targeting, such as state-level alerts, in the future, XM expressed concerns that its current system cannot support geographical targeting of even state-level alerts to affected subscribers.[200] XM states that there are two impediments for SDARS to transmit state or local alerts -- a satellite radio provider does not have an ENDEC unit located in every area where a local alert might originate, and a satellite radio provider's programming reaches subscribers nationwide.[201] Because SDARS providers face technical difficulties in distributing even state-level alerts to their subscribers, we will not at this time require SDARS to provide geographically-targeted alerts, including state-level alerts.

63. Likewise, DBS satellite service providers, such as EchoStar (Dish Network) and DIRECTV, transmit video programming on a nationwide basis to subscribers over a wide area. DIRECTV and PanAmSat state that currently DBS systems cannot distribute state and local alerts without interrupting programming across a wide area.[202] DIRECTV also states that its system currently does not have the capability to receive, sort, and disseminate state and local EAS messages only to the subscribers in the affected areas.[203] Because DBS providers also face technical difficulties in distributing alerts to portions of their subscribers, we will not at this time require DBS to provide geographically-targeted alerts, including state-level alerts.

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[196] SDARS is commonly known as "satellite radio."

[197] *First Report and Order*, 20 FCC Rcd at 18639-640, ¶ 40.

[198] *Id.* at 18641-42, ¶ 43.

[199] *Further Notice*, 20 FCC Rcd at 18652-53, ¶ 68.

[200] *See, e.g.,* June 9, 2006 *ex parte* meeting with Anthony Masiello, Senior Vice President, Broadcast Operations, and John Archer, Vice President, Operations, XM Radio, Inc.

[201] XM Comments at 4.

[202] DIRECTV Comments at 2; PanAmSat Comments at 5-6.

[203] DIRECTV Comments at 2. DIRECTV already provides state and local emergency information to many subscribers by retransmitting state and local alerts aired by local television broadcast stations in over 140 markets where it provides local-into-local service. *Id.* at 3.

b. Geographically Targeted Alerts at Less than State-Level

64. Although we are limiting the requirement that EAS Participants receive state level messages to messages received from state governors (or their designees) pursuant to CAP, we do not seek to restrict state use of the EAS network to only emergency messages that require statewide distribution. A governor could, for example, determine that certain emergencies warrant use of the EAS network to deliver a geographically-targeted alert to particular regions**.** Employing CAP will facilitate such geo-targeting, at least in connection with some technologies. Accordingly, we also require EAS Participants to deliver emergency alerts to areas smaller than a state. In order to transmit such targeted alerts, however, EAS Participants must be provided with CAP-formatted messages containing appropriate codes.[204] Further, EAS Participants may comply with this requirement by utilizing geographic-specific alerts such as subscripts utilizing localized information. Expanding our state-level alert transmission requirement to include geographically targeted alerts will afford each state governor the ability to determine the types and geographic scope of emergency alerts provided to residents via the EAS network, in coordination with the ability of EAS Participants in his or her state to accommodate such alerts. Importantly, however, in adopting this requirement, we note 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. This type of restriction is not necessary in order to comply with the requirements established in this Order.[205]

E. Coordination with State and Local Governments

1. Background

65. State and local participation in the EAS is not currently required by the Commission's rules. Nevertheless, all states, the District of Columbia, as well as many local jurisdictions, have elected to participate in the EAS to varying degrees. In order to participate in the EAS, entities must file an EAS plan with the Commission for review and approval "prior to implementation to ensure that they are consistent with national plans, FCC regulations, and EAS operation."[206] In the *2004 NPRM*, the Commission noted the importance of state and local EAS plans and requested comment on whether to require periodic updating and review of these plans.[207] In the *Further Notice*, the Commission reiterated this request and also asked whether it should require state and local entities to notify the Commission of any revisions to their EAS plans or their EAS designations (for example, NP, LP1, LP2, SR, and LR).[208] The Commission

[204] CAP incorporates geospatial elements to permit precise geographic targeting of alerts. For example, a CAP-formatted message could include the Federal Information Processing Standards (FIPS) Codes that correspond to the counties and independent cities expected to be affected by a storm.

[205] Thus, to the extent that there is a tornado warning for Gaithersburg, MD, it would be acceptable for a station to broadcast the alert in the entire D.C. Metropolitan area.

[206] Section 11.21 of the Commission's rules states that EAS plans "must be reviewed and approved by the Director, Office of Homeland Security, Enforcement Bureau [now, Chief, Public Safety and Homeland Security Bureau], prior to implementation to ensure that they are consistent with national plans, FCC regulations, and EAS operation." 47 C.F.R. § 11.21.

[207] *2004 NPRM*, 19 FCC Rcd at 15784, ¶ 25.

[208] *Further Notice*, 20 FCC Rcd at 18654, ¶ 73.

also inquired whether it should require state and local entities to annually confirm their plans and designations.[209]

2. Discussion

66. For nearly half a century, the Commission has encouraged state and local participation in the EAS (and its predecessor, the EBS), and we take additional steps today in this *Order* that will ensure the effective and efficient participation by states and local jurisdictions in the EAS. We note that the SECCs, industry participants, and state and local officials have worked closely with Commission staff to ensure the efficacy of the EAS, resulting in EAS plans for all 50 states.[210] The Commission has reviewed and approved EAS plans for a number of states,[211] and continues to have a cooperative, highly effective relationship with the SECCs.[212]

67. As a result of the actions we take today to ensure that state governors have a robust and reliable EAS network at their disposal, states will likely need to revise their EAS plans to specify how and what types of EAS alerts they will transmit to EAS Participants. Such information will enable the Commission, FEMA, affected EAS Participants, and other interested parties to ensure that these plans are implemented successfully. While we do not dictate specific plan revisions other than those set forth herein for implementing mandatory state-level alerts, we encourage states to include information regarding redundant distribution of EAS alerts. Since state EAS plans will be required to contain information concerning our new requirement that EAS Participants must distribute EAS alerts delivered by state governors, plans should specify how the governor's CAP-formatted EAS messages will be transmitted to all EAS Participants who provide services in the state. We also encourage states to submit an electronic data file specifying monitoring assignments and the paths for the Emergency Action Notification (EAN) from the NP to each station in their plans. We believe that such an electronic submission would facilitate the Commission's revision of the EAS "Map Book" required under the EAS rules.[213] We also urge states to provide detailed information identifying the monitored and monitoring broadcast stations.

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[209] *Id.*

[210] "The Emergency Alert Systems (EAS): An Assessment," Partnership for Public Warning, February 2004, PPW Report 2004-1, pg. 52.

[211] *See* www.fcc.gov/pshs/eas/Welcome.html.

[212] Commenters, including broadcasters and SECCs, support a mandatory state EAS plan filing requirement. *See, e.g.*, AFB 10/29/04 Comments at 2 (every state and municipality should adopt an EAS plan); California Broadcasters Assoc. 11/10/04 Comments at 12; ComLabs, Inc. 10/29/04 Comments at 8; Hearst-Argyle Television 10/29/04 Comments at 3-5 (all states would be required to file EAS plans and update them at least once every five years; National Center for Missing and Exploited Children 10/29/04 Comments at 5; New Hampshire SECC 10/27/04 Comments at 5; NC Association of Broadcasters 10/29/04 Comments at 9; Partnership for Public Warning 10/25/04 Comments at 4); State of Ohio Emergency Management Agency 10/27/04 Comments at 2; TFT 10/22/04 Comments at 6; Thomas Newell 10/29/04 Comments at 2; WTOP 10/29/04 Comments at 6. In addition, several commenters filed comments to the *FNPRM* recommending mandatory state plans. *See, e.g.*, Wireless RERC Comments at 9; NPSTC Comments at 6 (no entity is responsible for ensuring that every state adopts a plan); SBE Comments at 19-20.

[213] *See* 47 C.F.R. § 11.21(c).

68. In order to ensure that the Commission has sufficient notice of revised EAS plans, we will require state and local entities to file modified plans with the Commission at least 90 days before the effective date of any revision to their EAS plans or their EAS designations. In addition, we will require state and local entities to annually confirm their plans and designations.

69. We also agree with commenters and the specific recommendation of the Independent Panel that the Commission should proactively provide EAS training to interested parties.[214] We agree with Contra Costa that education to public safety and citizens is critical in making any type of infrastructure successful.[215] We also believe that the Alaska Broadcasters Association and the State Emergency Communications Committee (Joint Parties) in our EAS proceeding are correct in recommending that training be provided for emergency managers as well as subject broadcasters, cable systems and other media operators.[216] We take particular note of the argument of the Ohio Association of Broadcasters that proper training (and retraining) is a critical component of EAS, and supports training programs at the local level. OAB believes the Federal government also should be responsible for providing guidance to ensure that an appropriate minimum level of training of emergency management personnel is provided. According to OAB, a national training standard would ensure that training of persons who administer and activate EAS is uniform throughout local communities, states, and among federal, state and local government agencies.[217] Accordingly, we hereby instruct the Commission's Public Safety and Homeland Security Bureau to coordinate with FEMA on the appropriate requirements for and resources to conduct EAS training programs to ensure states and other interested parties can implement the Next Generation EAS.

F. Assessing EAS Operation

70. In the *Further Notice*, we asked whether performance standards are necessary to ensure that Next Generation technologies deliver alerts to the American public in a timely and accurate fashion.[218] We noted that proposed standards could include the length of time it takes to receive a message and the accuracy of the message.[219]

71. It is vital that the EAS operates as designed in an emergency. We intend to examine several potential mechanisms to ensure that is the case. In the Further Notice of Proposed Rulemaking, we seek comment on several options, including: (1) additional testing; (2) station certification of compliance; and (3) assessments of EAS performance after an alert has

[214] Some commenters have suggested that the Commission develop training programs and model state plans in conjunction with DHS and the Media Security and Reliability Council ("MSRC"). *See, e.g.,* SBE Comments at 19-21 (training sessions for emergency managers and broadcasters); NPSTC Comments at 7 (implementation of MSRC's recommendations); State Associations Comments at 14 (educate state and local emergency management); NYC Comments at 4 (training programs); State of Ohio Emergency Management Agency 10/27/04 Comments at 5 (recommending training).

[215] Contra Costa 10/29/04 Comments at 3.

[216] Joint Parties 11/1/04 Comments at 5.

[217] OAB Comments at 12-13.

[218] *Further Notice*, 20 FCC Rcd at 18654, ¶ 72.

[219] *Id.*

been triggered. We will revisit the issue of performance standards if it appears that they are warranted.

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IV. FURTHER NOTICE OF PROPOSED RULEMAKING[220]

72. *Non-English Speakers*. We recognize the need for *all* Americans – including those whose primary language is not English – to be alerted in the event of an emergency. We therefore seek comment on how non-English speakers may best be served by national, state and local EAS. In particular, we invite comment on how localities with non-English speakers should be identified. In which markets should special emergency alert rules apply? As MMTC et al. propose, should state and local EAS plans designate a "Local Primary Multilingual" station to transmit emergency information the relevant foreign language in local areas where a substantial proportion of the population has a fluency in a language other than English?[221] How should we quantify the "substantial proportion"? Should at least one broadcast station in every market, or some subset of markets, be required to monitor and rebroadcast emergency information carried by a "Local Primary Multilingual" station. And, should stations that remain on the air during an emergency be required to broadcast emergency information in the relevant foreign language to the extent that the "Local Primary Multilingual" station loses transmission capability. What criteria should the originator of an EAS message use in determining which languages to require EAS Participants to transmit? Should more than two languages be transmitted in certain areas? We seek comments on the technical, economic, practical, and legal issues, including the Commission's authority, involved in making emergency information accessible to persons whose primary language is not English. We would especially welcome comments on state-level or other efforts designed to address these issues. We note, for example, that Florida has implemented a program to promote the provision of emergency information to non-English speakers in that state, and that California and Texas have addressed the issue in their EAS plans filed with this Commission.[222] We direct the Public Safety and Homeland Security Bureau to convene a meeting – or series of meetings – as soon as possible concerning EAS as it relates to the needs of non-English speakers. The Bureau should thereafter submit into the record a progress report on these discussions within 30 days of this Order's release.

73. *Persons with Disabilities*. In this *Further Notice of Proposed Rulemaking* we reexamine the best way to make EAS and other emergency information accessible to persons with disabilities. We request comments on this subject, including, but not necessarily limited to the following key issues: (1) presentation of the audio feed in text format, and vice-versa; (2)

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[220] Given the importance of these issues, we intend to issue an order addressing the issues set forth below within six months.

[221] MMTC et. al at 4.

[222] Written Statement of Mr. C. Patrick Roberts, President of the Florida Association of Broadcasters, On the Lifesaving Role of Accurate Hurricane Predication, Before the Subcommittee on Disaster Prevention and Prediction of the Committee on Commerce, Science and Transpiration, United States Senate, at 3, 4, 5, 11 (Sept. 20, 2005), available at http://commerce.senate.gov/pdf/roberts.pdf. California EAS Plan, at 7 (revised July 2002); Texas EAS Plan,at 5 (revised March 2004).

making emergency information available to various devices commonly used by persons with disabilities; and (3) providing emergency messages in multiple formats to meet the needs of persons with disabilities. We also seek comment on the interaction between our Part 11 rules and section 79.2 of our rules. We welcome comments on the technical, economic, practical, and legal issues, including the Commission's authority, involved in making emergency information accessible to persons with disabilities.

74. *Other local official alerts*. Our action today enables state governors (or their designees) to initiate state-level and geo-targeted alerts for mandatory transmission by EAS Participants. Since, as stated above, EAS activations to date have been overwhelmingly related to weather and state and local alerts, we seek comment on whether EAS Participants should be required to receive and transmit alerts initiated by government entities other than a state governor. Should local, county, tribal, or other state governmental entities be allowed to initiate mandatory state and local alerts? How should the Commission decide which public officials should be permitted to activate the alert? Should the expansion of mandatory state and local alerts be limited to certain types of alerts? We seek comment on whether the Commission should specify the types of emergency alerts that these local officials should be permitted to activate? Should only certain classes of EAS Participants be required to transmit such alerts by entities other than the governor? Does CAP allow for proper delivery of such alerts, or should such alerts be mandatory only in the context of Next Generation EAS? What other considerations should govern the appropriate use of a mandatory alerting process by entities other than a governor? We seek comment generally on how this type of requirement should be implemented.

75. *Assessing EAS Operation*. We seek comment on several options for ensuring that EAS operates as designed in an emergency, including whether we should require: (1) additional testing of the EAS,[223] and specifically CAP; (2) station certification of compliance; and (3) assessments of EAS performance after an alert has been triggered. We will revisit the issue of performance standards if it appears that they are warranted. In particular, we seek comments on the technical, economic, practical, and legal issues involved.

V. PROCEDURAL MATTERS

A. *Ex Parte* Presentations

76. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[224] 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.[225] Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.

[223] *See* 47 C.F.R. § 11.61(a) (distinguishing 'additional' EAS tests from 'required' tests).

[224] 47 C.F.R. §§ 1.200 *et seq*.

[225] *See* 47 C.F.R. § 1.1206(b)(2).

B. Comment Filing Procedures

77. 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 Order and the Further Notice of Proposed Rulemaking should refer to EB Docket No. 04-296**. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) 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 Internet 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-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.

    - The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002. 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.

    - 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

78. 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

79. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 604, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The FRFA is set forth in Appendix B.

80. 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 D. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this Further Notice of Proposed Rulemaking as set forth in paragraph 77, and have a separate and distinct heading designating them as responses to the IRFA.

E. Paperwork Reduction Act Analysis

81. This Second Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 ("PRA"), Public Law 104-13. It will be submitted to the Office of Management and Budget ("OMB") for review under Section 3507(d) of the PRA.

F. Congressional Review Act

82. The Commission will send a copy of this Second Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act ("CRA"), *see* 5 U.S.C. § 801(a)(1)(A).

VI. ORDERING CLAUSES

83. 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. the Second Report and Order and Further Notice of Proposed Rulemaking in EB Docket No. 04-296 IS ADOPTED, and that Part 11 of the Commission's Rules, 47 C.F.R. Part 11, is amended as set forth in Appendix C. The Order shall become effective 30 days after publication in the Federal Register, except that new or modified information collection requirements contained in Appendix C will not become effective prior to OMB approval; and

84. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Second Report and Order and Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

List Of Commenters

Comments in EB Docket No. 04-296

Commenters	Abbreviation
Active Data Exchange, Inc.	Active Data
Airit2me, Inc.	Airit2me
Alert Systems, Inc.	Alert Systems
American Association of Paging Carriers	AAPC
American Foundation for the Blind	AFB
Association of Maximum Service Television	AMST
Association of Public Broadcasting	APB
AT&T	AT&T
Azos AI, LLC	Azos
Bell, Frank W.	Bell
BellSouth	BellSouth
Brooks, Rex	Brooks
Brown, Robert	Brown
Cellular Telecommunications & Internet Association	CTIA
City of New York	NYC
Cingular	Cingular
Cohen, Philip	Cohen
Community Broadcasters Association	CBA
Consumer Electronics Association	CEA
Cox Broadcasting	COX
DIRECTV	DIRECTV
Dodds, Betty	Dodds
EchoStar	EchoStar
Emergency E-Mail & Wireless Network	EEWN
Ericsson Inc.	Ericsson
Harris Corporation	Harris
Jones, Elysa	Jones
Marks, Alan R.	Marks
Merrell, John	Merrell
Minority Media & Telecommunications Council, Independent Spanish Broadcasters, *et. al.*	MMTC
Named State Broadcasters Associations	State Associations
National Association of Broadcasters	NAB
National Cable & Telecommunications Association	NCTA
National Public Safety Telecommunications Council	NPSTC
Notification Technologies, Inc.	NT
PanAmSat, *et. al.*	PanAmSat
Putkovich, Kenneth	Putkovich

RadioShack Corporation	RadioShack
Rehabilitation Engineering Research Center on Mobile Wireless Technologies	RERC Wireless
Research Center on Telecommunications Access	RCTA
Rural Cellular Association	RCA
Society of Broadcast Engineers, Inc.	SBE
Sprint Nextel	Sprint Nextel
Telecommunications for the Deaf and Hard of Hearing	TDI
TFT, Inc.	TFT
T-Mobile	T-Mobile
U.S. Geological Survey	USGS
USA Mobility, Inc.	USA Mobility
VeriSign	VeriSign
Verizon	Verizon
WFSA-TV Montgomery, AL	WFSA-TV
WGBH National Center for Accessible Media and Rehabilitation Engineering	WGBH
XM Radio Inc.	XM

Reply Commenters	**Abbreviation**
3G Americas, LLC	3G
Airit2me, Inc.	Airit2me
Association for Maximum Service Television, Inc.	AMST
AT&T	AT&T
Bell, Frank W.	Bell
Cingular Wireless LLC	Cingular
Communication Service for the Deaf, Inc.	CSD
CTIA - The Wireless Association™	CTIA
Dominion Video Satellite Inc.	DVS
EchoStar Satellite LLC	EchoStar
Minority Media & Telecommunications Council, Independent Spanish Broadcasters, *et. al.*	MMTC
National Association of Broadcasters	NAB
National Cable & Telecommunications Association	NCTA
National Public Safety Telecommunications Council	NPSTC
NYC Department of Information Technology and Telecommunications	NYC
Putkovich, Kenneth	Putkovich
Rural Cellular Association	RCA
Telecommunications for the Deaf and Hard of Hearing, Inc.	TDI
TFT, Inc.	TFT
T-Mobile USA, Inc.	T-Mobile
USA Mobility, Inc.	USA Mobility

APPENDIX B

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act ("RFA"),[226] an Initial Regulatory Flexibility Analysis ("IRFA") was incorporated in the Further Notice of Proposed Rulemaking in EB Docket 04-296 ("*First Report and Order and FNPRM*").[227] The Commission sought written public comment on the proposals in the *EAS NPRM*, including comment on the IRFA. This Final Regulatory Flexibility Analysis ("FRFA") conforms to the RFA.

A. Need for, and Objectives of, the Rules

2. This *Second Report and Order* adopts rules that set the framework for a Next Generation EAS. In this Order, we take the following actions to establish service requirements for a Next Generation EAS, and establish schedules by which industry segments must transition to the new system: (1) require EAS Participants to configure their systems to accept EAS alerts formatted in the Common Alerting Protocol ("CAP") format no later than 180 days after FEMA announces the technical standards and requirements for CAP-formatted messages; (2) require EAS Participants to configure their systems to authenticate and validate EAS alerts formatted in the CAP format no later than 180 days after FEMA announces the standards for authentication and validation of CAP-formatted messages; (3) require EAS Participants to receive and transmit state-level messages delivered to the Participant by the state's governor (or the governor's designee) within 180 days from the date FEMA adopts CAP, so long as such delivery is explicitly described in a state EAS plan that is submitted to and approved by the Commission; (4) require wireline common carriers that provide video programming service to receive and distribute EAS messages; and (5) delegate authority to the Chief, Public Safety and Homeland Security Bureau to perform actions that will facilitate proper implementation of our rules and resolution of issues as set forth herein.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

3. There were no comments filed that specifically addressed the IRFA.

[226] *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).

[227] *See Review of the Emergency Alert System*, EB Docket No. 04-296, First Report and Order and Further Notice of Proposed Rulemaking, 20 FCC Rcd 18625 (2005) ("*First Report and Order and FNPRM*").

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

4. 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.[228] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[229] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[230] 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").[231]

5. A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[232] Nationwide, as of 2002, there were approximately 1.6 million small organizations.[233] The term "small governmental jurisdiction" is defined as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[234] As of 1997, there were approximately 87,453 governmental jurisdictions in the United States.[235] This number includes 39,044 county governments, municipalities, and townships, of which 37,546 (approximately 96.2 percent) have populations of fewer than 50,000, and of which 1,498 have populations of 50,000 or more. Thus, we estimate the number of small governmental jurisdictions overall to be 84,098 or fewer. Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.[236]

6. *Television Broadcasting*. The SBA has developed a small business sized standard for television broadcasting, which consists of all such firms having $13 million or less in annual receipts.[237] Business concerns included in this industry are those "primarily engaged in

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[228] 5 U.S.C. § 604(a)(3).

[229] 5 U.S.C. § 601(6).

[230] 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).

[231] 15 U.S.C. § 632.

[232] 5 U.S.C. § 601(4).

[233] Independent Sector, The New Nonprofit Almanac & Desk Reference (2002).

[234] 5 U.S.C. § 601(5).

[235] U.S. Census Bureau, Statistical Abstract of the United States: 2000, Section 9, pages 299-300, Tables 490 and 492.

[236] *See* SBA, Programs and Services, SBA Pamphlet No. CO-0028, 40 (Jul. 2002).

[237] 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 515120.

broadcasting images together with sound."[238] According to Commission staff review of BIA Publications, Inc. Master Access Television Analyzer Database, as of May 16, 2003, about 814 of the 1,220 commercial television stations in the United States had revenues of $12 million or less. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[239]must be included.[240] 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. There are also 2,127 low power television stations ("LPTV").[241] Given the nature of this service, we will presume that all LPTV licensees qualify as small entities under the SBA size standard.

7. *Radio Stations.* The revised rules and policies potentially will apply to all AM and commercial FM radio broadcasting licensees and potential licensees. The SBA defines a radio broadcasting station that has $6.5 million or less in annual receipts as a small business.[242] A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.[243] Included in this industry are commercial, religious, educational, and other radio stations.[244] Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included.[245] However, radio stations that are separate establishments and are primarily engaged in producing radio program material are classified under another NAICS number.[246] According to Commission staff review of BIA Publications, Inc. Master Access Radio Analyzer Database on March 31, 2005, about 10,840 (95 percent) of 11,410 commercial radio stations have revenue of $6 million or less. We note, however, that many radio stations are affiliated with much larger corporations

[238] Office of Management and Budget, North American Industry Classification System: United States, 1997, at 509 (1997). 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. *Id*. at 502-05, NAICS code 512120, Motion Picture and Video Production; NAICS code 512120, Motion Picture and Video Distribution; NAICS code 512191, Teleproduction and Other Post-Production Services; and NAICS code 512199, Other Motion Picture and Video Industries.

[239] "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).

[240] "SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic concern's size." 13 C.F.R. § 121.103(a)(4).

[241] *Broadcast Station Totals as of September 30, 2002*, FCC News Release (rel. Nov. 6, 2002).

[242] *See* 13 C.F.R. § 121.201, NAICS code 515112.

[243] *Id*.

[244] *Id*.

[245] *Id*.

[246] *Id*.

having much higher revenue. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action.

8. *Cable and Other Program Distribution*. The SBA has developed a small business size standard for cable and other program distribution, which consists of all such firms having $12.5 million or less in annual receipts.[247] According to Census Bureau data for 1997, in this category there was a total of 1,311 firms that operated for the entire year.[248] Of this total, 1,180 firms had annual receipts of under $10 million, and an additional 52 firms had receipts of $10 million to $24,999,999.[249] Thus, under this size standard, the majority of firms can be considered small. In addition, limited preliminary census data for 2002 indicate that the total number of cable and other program distribution companies increased approximately 46 percent from 1997 to 2002.[250]

9. *Cable System Operators (Rate Regulation Standard)*. The Commission has developed its own small business size standard for cable system operators, for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.[251] We have estimated that there were 1,065 cable operators who qualified as small cable system operators at the end of 2005.[252] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, the Commission estimates that there are now fewer than 1,065 small entity cable system operators that may be affected by the rules and policies proposed herein.

10. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, ("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."[253] The Commission has determined that there are 67,700,000 subscribers in the United States.[254] Therefore, an operator

[247] 13 C.F.R. § 121.201, NAICS code 517510.

[248] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, *Establishment and Firm Size (including Legal Form of Organization)*, Table 4, NAICS code 513220.

[249] *Id*.

[250] *See* U.S. Census Bureau, 2002 Economic Census, Industry Series: "Information," Table 2, Comparative Statistics for the United States (1997 NAICS Basis): 2002 and 1997, NAICS code 513220 (issued Nov. 2004).

[251] 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of $100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393 (1995), 60 FR 10534 (February 27, 1995).

[252] Paul Kagan Associates, Inc., Cable TV Investor, February 29, 1996 (based on figures for Dec. 30, 1995).

[253] 47 U.S.C. § 543(m)(2).

[254] *See FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (2001) ("*Jan. 24, 2001 Public Notice*").

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.[255] Based on available data, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,065.[256] The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[257] and therefore are unable, at this time, to estimate more accurately the number of cable system operators that would qualify as small cable operators under the size standard contained in the Act.

11. *Multipoint Distribution Systems*. The established rules apply to Multipoint Distribution Systems ("MDS") operated as part of a wireless cable system. The Commission has defined "small entity" for purposes of the auction of MDS 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.[258] This definition of small entity in the context of MDS auctions has been approved by the SBA.[259] 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.

12. MDS also includes licensees of stations authorized prior to the auction. As noted above, the SBA has developed a definition of small entities for pay television services, cable and other subscription programming, which includes all such companies generating $13.5 million or less in annual receipts.[260] This definition includes MDS and thus applies to MDS licensees that did not participate in the MDS auction. Information available to us indicates that there are approximately 392 incumbent MDS licensees that do not generate revenue in excess of $11 million annually. Therefore, we estimate that there are at least 440 (392 pre-auction plus 48 auction licensees) small MDS providers as defined by the SBA and the Commission's auction rules which may be affected by the rules adopted herein. In addition, limited preliminary census data for 2002 indicate that the total number of cable and other program distribution companies increased approximately 46 percent from 1997 to 2002.[261]

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[255] 47 C.F.R. § 76.901(f).

[256] *See Jan. 24, 2001 Public Notice*.

[257] 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 section 76.901(f) of the Commission's rules. *See* 47 C.F.R. § 76.909(b).

[258] 47 C.F.R. § 21.961(b)(1).

[259] *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).

[260] 13 C.F.R. § 121.201, NAICS code 515210.

[261] *See* supra note 250.

13. *Instructional Television Fixed Service*. The established rules would also apply to Instructional Television Fixed Service ("ITFS") facilities operated as part of a wireless cable system. The SBA definition of small entities for pay television services also appears to apply to ITFS.[262] There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business.[263] However, we do not collect annual revenue data for ITFS 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 established rules.

14. *Incumbent Local Exchange Carriers ("LECs")*. We have included small incumbent LECs in this present 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."[264] 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.[265] 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 that size standard, such a business is small if it has 1,500 or fewer employees.[266] According to Commission data,[267] 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.

15. *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

[262] 13 C.F.R. § 121.201, NAICS code 515210.

[263] 5 U.S.C. § 601(3).

[264] 15 U.S.C. § 632.

[265] 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).

[266] 13 C.F.R. § 121.201, NAICS code 517110.

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

Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[268] According to Commission data,[269] 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 that may be affected by our proposed rules.

16. *Satellite Telecommunications and Other Telecommunications*. The Commission has not developed a small business size standard specifically for providers of satellite service. The appropriate size standards under SBA rules are for the two broad categories of Satellite Telecommunications and Other Telecommunications. Under both categories, such a business is small if it has $12.5 million or less in average annual receipts.[270] For the first category of Satellite Telecommunications, Census Bureau data for 1997 show that there were a total of 324 firms that operated for the entire year.[271] Of this total, 273 firms had annual receipts of under $10 million, and an additional twenty-four firms had receipts of $10 million to $24,999,999. Thus, the majority of Satellite Telecommunications firms can be considered small.

17. The second category – *Other Telecommunications* – includes "establishments primarily engaged in … providing satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems."[272] Of this total, 424 firms had annual receipts of $5 million to $9,999,999 and an additional 6 firms had annual receipts of $10 million to $24,999,990. Thus, under this second size standard, the majority of firms can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

18. In this Second Report and Order, we have taken steps to advance our public safety mission by establishing a framework for the Next Generation of EAS and by expanding the base

[268] 13 C.F.R. § 121.201, NAICS code 517110.

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

[270] 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

[271] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, *Establishment and Firm Size (Including Legal Form of Organization)*, Table 4, NAICS code 513340.

[272] Office of Management and Budget, North American Industry Classification System, 513 (1997) (NAICS code 517910.

of EAS participants to include wireline telephone companies that provide programming in competition with broadcast and cable television.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

19. 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."[273]

20. The *First Report and Order and FNPRM* sought comment on a number of alternatives to the imposition of EAS obligations on the digital communications technologies discussed in this Second Report and Order that are increasingly being used by the American public. The Commission has considered each of the alternatives and in this Second Report and Order imposes minimal regulation on small entities to the extent consistent with our goal of advancing our public safety mission by adopting rules that expand the reach of EAS. The affected service providers have generally expressed their willingness to cooperate in a national warning system, and we anticipate that this addition of new providers to EAS can be accomplished swiftly and smoothly.

21. The benefits of requiring additional carriers to participate in the current EAS far outweigh any burdens associated with implementing these requirements. EAS represents a significant and valuable investment that is able to provide effective alert and warning during the time that new, digitally-based public alert and warning systems are being developed. Most commenters contend, and we agree, that the EAS should remain an important component of any future alert and warning system. Further, in most cases, the digital platforms affected by this Second Report and Order either have in place the ability to distribute EAS warnings, or can do so in a reasonable amount of time and with minimal cost.

22. Likewise, most commenters agreed that CAP is best-suited to deliver Next Generation EAS. By requiring EAS participants to adopt CAP, we believe that this will best serve our goal of protecting the life and property of all Americans. We acknowledge that compliance with the rules adopted in the order may impose cost burdens on small entities. However, given the great public interest benefits of the rules, we find that the public interest benefits outweigh the economic burdens, if any. In the Initial Regulatory Flexibility Analysis, we sought comment on these rules and no commenter proposed an alternative version that would serve these benefits while lessening the economic burdens. Accordingly, we find that we have discharged our duty to consider burdens imposed on small entities.

[273] 5 U.S.C. § 603(c)(1) – (c)(4).

23. **Report to Congress:** The Commission will send a copy of the Second Report and Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.[274] In addition, the Commission will send a copy of the Second Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the Second Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register.[275]

[274] *See* 5 U.S.C. § 801(a)(1)(A).

[275] *See* 5 U.S.C. § 604(b).

APPENDIX C

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 C.F.R. Part 11 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. Revise § 11.1 to read as follows:

§ 11.1 Purpose.

This part contains rules and regulations providing for an Emergency Alert System (EAS). The EAS provides the President with the capability to provide immediate communications and information to the general public at the National, State and Local Area levels during periods of national emergency. The rules in this part describe the required technical standards and operational procedures of the EAS for analog AM, FM, and TV broadcast stations, digital broadcast stations, analog cable systems, digital cable systems, wireline video systems, wireless cable systems, Direct Broadcast Satellite (DBS) services, Satellite Digital Audio Radio Service (SDARS), and other participating entities. The 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.

3. Add new § 11.2, as follows:

§ 11.2 Definitions

The definitions of terms used in Part 11 are:

(a) *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 the EAN, EAT, and EAS national test messages and other EAS messages. FEMA has designated 34 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.

(b) *Local Primary One (LP-1).* The LP-1 is a radio 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.

(c) *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.

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

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

(f) *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.

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

4. Amend § 11.11 by revising paragraph (a) and (e) to read 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; analog television broadcast stations including 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 47 C.F.R. § 25.701(a) (including certain Ku-band Fixed-Satellite Service Direct to Home providers); SDARS, as defined in 47 C.F.R. § 25.201; 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 in accordance with the effective dates listed above and in the following tables:

Analog and Digital Broadcast Stations

EAS Equipment Requirement	AM & FM Class A TV[279]	Digital TV AM & FM	DTV	FM Class D[276]	LPTV[277]	LPFM[278]
Two-tone encoder[280] [281]	Y	Y 12/31/06	Y	Y 12/31/06	N	N	N	Y
EAS decoder	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 1/1/97	Y	Y
EAS encoger	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	N	N	N	Y
Audio message	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 1/1/97	Y	Y
Video message	N/A	N/A	Y 1/1/97	Y 12/31/06	N/A	Y 1/1/97	N/A	Y

[1] Effective December 31, 2006, digital FM Class D stations have the same requirements.
[2] LPTV stations that operate as television broadcast translator stations are exempt from the requirement to have EAS equipment. Effective December 31, 2006, digital LPTV stations have the same requirements.
[3] LPFM stations must install a decoder within one year after the FCC publishes in the Federal Register a public notice indicating that at least one decoder has been certified by the FCC. Effective December 31, 2006, digital LPFM stations have the same requirements.
[4] Effective December 31, 2006, digital Class A TV stations have the same requirements.
[5] Effective July 1, 1995, the two-tone signal must be 8-25 seconds
[6] Effective January 1, 1998, the two-tone signal may only be used to provide audio alerts to audiences before EAS emergency messages and the required monthly tests.

Analog Cable Systems

[A. Analog cable 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 by October 1, 2002, or comply with the following EAS requirements. All other analog cable systems must comply with B.]

	System size and effective dates		
B. EAS Equipment Requirement	>=5,000 but < 10,000 subscribers	>=10,000 subscribers	<5,000 subscribers
Two-tone signal from storage device[1]	Y 12/31/98	Y 10/1/02	Y 10/1/02
EAS decoder[3]	Y 12/31/98	Y 10/1/02	Y 10/1/02
EAS encoder[2]	Y 12/31/98	Y 10/1/02	Y 10/1/02
Audio and Video EAS Message on all channels	Y 12/31/98	Y 10/1/02	N
Video interrupt and audio alert message on all channels,[3] Audio and Video EAS message on at least one channel	N	N	Y 10/1/02

[1] Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8-25 seconds in duration.

[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)

[A. 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 by October 1, 2002, or comply with the following EAS requirements. All other wireless cable systems must comply with B.]

	System size and effective dates	
B. EAS Equipment Requirement	>= 5,000 subscribers	< 5,000 subscribers
EAS decoder	Y 10/1/02	Y 10/1/02
EAS encoder \1\ \2\	Y 10/1/02	Y 10/1/02
Audio and Video EAS Message on all channels \3\	Y 10/1/02	N
Video interrupt and audio alert message on all channels; \4\ Audio and Video EAS message on at least one channel	N	Y 10/1/02

\1\ The two-tone signal is used only to provide an audio alert to an audience prior to an EAS emergency message or to the Required Monthly Test (RMT) under § 11.61(a)(1). The two-tone signal must be 8-25 seconds in duration.

\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

[A. 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 by December 31, 2006, or comply with the following EAS requirements. All other digital cable systems and Wireline Video Systems must comply with B.]

	System size and effective dates	
B. EAS Equipment Requirement	>=5,000 subscribers	<5,000 subscribers
Two-tone signal from storage device\1\	Y 12/31/06	Y 12/31/06
EAS decoder \3\	Y 12/31/06	Y 12/31/06
EAS encoder \2\	Y 12/31/06	Y 12/31/06
Audio and Video EAS Message on all channels \4\	Y 12/31/06	N
Video interrupt and audio alert message on all channels;\3\ Audio and Video EAS message on at least one channel	N	Y 12/31/06

\1\ Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8-25 seconds in duration.

\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\ 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.

\4\ 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.

Note: Programmed channels do not include channels used for the transmission of data such as interactive games or the transmission of data services such as Internet.

SDARS and DBS

EAS Equipment Requirement	SDARS	DBS
Two-tone signal \1\	Y 12/31/06	Y 5/31/07
EAS decoder	Y 12/31/06	Y 5/31/07
EAS encoder	Y 12/31/06	Y 5/31/07
Audio message on all channels \2\	Y 12/31/06	Y 5/31/07
Video message on all channels \2\	N/A	Y 5/31/07

\1\ Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and
required monthly test. The two-tone signal must be 8-25 seconds in duration.
\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.

* * * * *

(e) Other technologies and public service providers, such as low earth orbiting satellites, that wish to participate in the EAS may contact the FCC's Public Safety and Homeland Security Bureau or their State Emergency Communications Committee for information and guidance.

5. Revise § 11.21 introductory text and revise sections (a), (b), and (c) as follows:

§ 11.21 State and Local Area Plans and FCC Mapbook.

EAS plans contain guidelines which must be followed by EAS Participants' personnel, emergency officials, and National Weather Service (NWS) personnel to activate the EAS. The plans include the EAS header codes and messages that will be transmitted by key EAS sources (NP, LP, SP and SR). State and local plans contain unique methods of EAS message distribution such as the use of the Radio Broadcast Data System (RBDS). The plans must be reviewed and approved by the Chief, Public Safety and Homeland Security Bureau, prior to implementation to ensure that they are consistent with national plans, FCC regulations, and EAS operation.

(a) The State 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, including mandatory messages initiated by a state governor or his/her designee. 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. State 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.

(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. Local plans may be a part of the State plan. A Local Area is a geographical area of contiguous communities or counties that may include more than one state.

(c) The FCC Mapbook is based on the above plans. It organizes all broadcast stations and cable systems according to their State, EAS Local Area, and EAS designation.

* * * * *

6. Revise § 11.47(b) to read as follows:

Other technologies and public service providers, such as low earth orbiting satellites, that wish to participate in the EAS may contact the FCC's Public Safety and Homeland Security Bureau or their State Emergency Communications Committee for information and guidance.

7. Revise § 11.51 (g) as follows:

(g) Analog cable systems and digital cable systems with fewer than 5,000 subscribers per headend and wireline video systems and wireless cable systems with fewer than 5,000 subscribers….. [rest of paragraph *manet*]

8. Revise § 11.51 (h) as follows:

(h) Analog cable systems and digital cable systems with 10,000 or more subscribers; analog cable and digital cable systems serving 5,000 or more, but less than 10,000 subscribers per headend; and wireline video systems and wireless cable systems with 5,000 or more subscribers... [rest of paragraph *manet*]

8. Amend § 11.55 by revising paragraph (a) to read as follows:

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

(a) All 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 or his/her designee, or by FEMA on behalf of such state governor, upon approval by the Commission of an applicable state plan providing for delivery of such alerts no sooner than 180 days after adoption of CAP by FEMA… [(a)(1) and a(2) *manet*]

9. (1) Add new § 11.56 as follows:

§ 11.56 EAS Participants receive CAP-formatted alerts

Notwithstanding anything herein to the contrary, all EAS Participants must be able to receive CAP-formatted EAS alerts no later than 180 days after FEMA publishes the technical standards and requirements for such FEMA transmissions.

APPENDIX D

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[282] the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Further Notice of Proposed Rulemaking *(Further Notice)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Further Notice* provided in Section IV of the item. The Commission will send a copy of the *Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[283] In addition, the *Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[284]

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

2. Today's *Second Report and Order* seeks to ensure that the Commission's emergency alert services ("EAS") rules better protect the life and property of all Americans.[285] To further serve this goal, the *Further Notice* invites additional comment on four areas where the EAS rules might be amended. Recognizing the need of all Americans to be alerted in the event of an emergency, the Commission invites comments first on non-English speakers and second on persons with disabilities to determine how these communities might best be served by EAS. Third, the Commission invites comment on whether emergency alerts transmitted by local authorities should be transmitted. Fourth, the Commission invites comment on various ways that the performance of EAS operations may be assessed.[286]

B. Legal Basis

3. Authority for the actions proposed in this *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

[282] *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).

[283] *See* 5 U.S.C. § 603(a).

[284] *Id.*

[285] *See* Appendix B at ¶ 2 for description of rules the Commission adopted in the *Second Report and Order*.

[286] *See Further Notice* at ¶¶ 71-74 for a more detailed discussion of these four subject matter areas.

4. 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.[287] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[288] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[289] 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).[290]

5. See Appendix B, Final Regulatory Flexibility Analysis, attached hereto for a detailed description of, and an estimate of, the number of small entities that may be affected by any rules that may be adopted in response to the *Further Notice.*

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

6. There are potential reporting or recordkeeping requirements proposed in this *Further Notice.* For example, the Commission is considering whether to adopt performance standards and reporting obligations for EAS participants. The proposals set forth in this *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

7. 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."[291]

8. As noted in paragraph 2 above, the *Further Notice* seeks comment on how the Commission may better protect the lives and property of Americans. In commenting on this

[287] 5 U.S.C. § 604(a)(3).

[288] 5 U.S.C. § 601(6).

[289] 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).

[290] 15 U.S.C. § 632.

[291] 5 U.S.C. § 603(c)(1) – (c)(4).

goal, commenters are invited to propose steps that the Commission may take to minimize any significant economic impact on small entities. When considering proposals made by other parties, commenters are invited to propose significant alternatives that serve the goals of these proposals. We expect that the record will develop to demonstrate significant alternatives.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

None.

STATEMENT OF
CHAIRMAN KEVIN J. MARTIN

Re: *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,* EB Docket No. 04-296.

Public safety is one of the Commission's top priorities. The public must have the tools necessary to know when an emergency is coming and what type of emergency it is. The government's success in enabling reliable and effective communications can often mean the difference between life and death.

The Emergency Alert System (EAS) is designed to provide a means of warning the American people in the event of a national emergency. The EAS should be capable of disseminating emergency information as quickly as possible. As with every aspect of today's technological revolution, technological changes require us to update EAS to ensure it is a state-of-the art, next-generation system. As such, it is imperative that this system continually be revised and expanded to reflect new technologies. Shortly after I became Chairman, the Commission expanded the system to include participation by digital television broadcasters, digital cable television providers, digital broadcast radio, Digital Audio Radio Service (DARS) and DBS systems. In fact, the rules regarding DBS systems take effect today.

In today's order, we revise and expand the system once again. Specifically, the item we adopt today makes the EAS system more reliable, secure, and efficient by requiring all EAS participants to be able to receive EAS warnings sent using a common alert protocol (CAP) once that protocol is adopted by FEMA. CAP, which employs an open and interoperable standard, standardizes message formats and enables a digitally-based alert or warning to be distributed simultaneously over multiple distribution platforms. We also expand the scope of participation in the system to include wireline video service providers. It is critical that our public safety rules, like our competition rules, be technologically neutral. Thus, all platform providers should have the same obligations to notify the public of emergency situations. After all, video programming viewers expect to receive an emergency alert regardless of whether they subscribe to a cable, DBS, or any wireline video service.

The order does not stop there however. Although traditionally EAS participants have only been required to disseminate Presidential alerts, today we take steps to require EAS participants to receive and pass along state-level alerts triggered by a state governor. We also require EAS participants to transmit geo-targeted alerts to areas smaller than a state. These actions are critical in ensuring that the citizens most in need of receiving emergency information receive it quickly and effectively.

I am also pleased that the Commission is adopting a Further Notice in this proceeding. It is the government's responsibility to ensure that the communications needs of all Americans, including non-English speakers and people with disabilities, are met in the event of an emergency. I agree that more work needs to be done to address the public safety needs of

persons with disabilities and non-English speakers. It is my hope that by the specific questions we raise in these areas, the Commission will be in a better position to adopt meaningful rules that enable these citizens to receive emergency information on a timely basis. I also hope that the industry will continue to work hard to find a way to provide multilingual alerts on its own.

In addition, local public safety officials need to be permitted to activate emergency alerts. Local officials are often best-situated to serve the needs of their own communities. I look forward to finding a way to better utilize and empower local public safety officials as well.

The success of the EAS is dependent not only on the ability of the Commission to adopt the appropriate rules to ensure that the communications systems are capable of sending and receiving alerts to the public but is also dependent on our continued collaboration and coordination with the Department of Homeland Security who is charged with administering the system. We look forward to continuing to work with our federal colleagues as well state and local officials and all the EAS participants to ensure that the United States continues to have a robust, dynamic, and dependable alert system. Timely and reliable communication is most critical in times of crisis. We are committed to expending whatever resources are necessary to do our part in implementing a resilient next-generation EAS system that will effectively serve our citizens for decades to come.

STATEMENT OF
COMMISSIONER MICHAEL J. COPPS

Re: *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,* EB Docket No. 04-296.

No one who has lived through recent American history needs to be reminded of the importance of a warning system that reaches ***all*** of our citizens with timely emergency and public safety information. In order to achieve that goal, we need an Emergency Alert System that is more flexible, more robust and more compatible with the technologies that Americans are adopting in their everyday lives. In other words, EAS needs to move into the digital age.

One promising step is our adoption of Common Alerting Protocols (CAP), a standardized alert message format that will permit emergency messages to flow across various digital platforms and devices, thereby dramatically increasing the possible avenues for alerts to reach the public. The Commission also mandates the use of CAP's security functions to strengthen significantly EAS defenses against hacking, jamming, or other unauthorized use.

CAP is a positive step, but we still have much work ahead of us. I am particularly committed to take whatever steps we can to ensure that emergency and public safety information is fully accessible by persons with disabilities and residents whose primary language is not English. This includes EAS, but may involve other Commission rules and licensee obligations. We need to take a comprehensive view of whether these communities have access to the emergency information they need and deserve – and this is the ideal time to do it, when broadcast TV, radio, and all of our media are moving to digital. I thank the Chairman and my colleagues for taking a proactive approach and making these issues a priority. We need solutions, and we need them now.

I'm also pleased that we have given state governors the ability to trigger the mandatory EAS system. State and local governments play a crucial role in the EAS process. While the federal EAS system has never been activated, there are hundreds of state and local warnings issued every year. Our decision will permit state governors to activate the system – not only state-wide, but also for a geographically-targeted area affected by a local emergency. And I support the idea of looking at whether mayors or other local officials should have the authority to trigger EAS alerts as well.

While the move to digital promises great changes, one thing that will not change is the need to assess whether the system is operating properly. We have not done a very good job of that up to now. I appreciate my colleagues' willingness to clearly state that we intend to make sure that the system works, and to seek comment on the best method for doing so. The answer may involve additional testing, licensee certification, or after-the-fact reviews of system

performance. Whatever the method, however, the American public deserves an EAS system that it can count on when the next hurricane or terrorist attack occurs.

I thank the Chairman for his willingness to issue a Further Notice of Proposed Rulemaking to address these issues and for putting this proceeding on the fast track. We do not have the luxury of time. I look forward to working with my colleagues to bring this proceeding to a quick conclusion.

Finally, I want to acknowledge the presence of many in the disabilities community who have made the effort to attend our meeting today. We will need your continued assistance – as well as the assistance of those representing the non-English speaking community – as we work our way through these issues.

STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

Re: *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,* EB Docket No. 04-296.

I support today's *Report and Order* mindful of two essential facts. First, one of the central purposes for the very creation of the FCC is to promote the safety of life and property of all – and I mean *all* – Americans, without discrimination on the basis of race, color, religion, national origin, or sex. And second, the Atlantic hurricane season officially begins tomorrow, June 1st. The National Oceanic and Atmospheric Administration's 2007 Atlantic hurricane season outlook indicates a very high 75 percent chance of an above-normal hurricane season, a 20 percent chance of a near-normal season, and only a five percent chance of a below-normal season. Taken together, this means that the Commission should not be bashful about using its authority to execute our public safety mandate because it is just a matter of time before we experience another emergency and people's lives literally depend upon our actions.

Today's *Report and Order* primarily addresses the requirements for broadcast, cable and satellite entities participating in the Emergency Alert System (EAS) to receive and disseminate federal and state messages using Common Alerting Protocol or CAP – the next-generation EAS messaging protocol – six months after FEMA formally adopts the new protocol. In *First Report and Order*, we expanded the EAS rules to include digital broadcast and cable TV, digital audio broadcasting, satellite radio, and direct broadcast satellite services. Today's *Second Report and Order* takes the modest step to include wireline video providers in EAS, irrespective of their regulatory classification as video or information service providers. We also specifically permit the transmission of state-level EAS alerts and warnings that are originated by state governors.

While these are all modest steps, they are nevertheless important to ensure that the current and next generation EAS network facilitates prompt and accurate delivery of national, state and local messages to ensure the safety and security of the American people during natural or man-made disasters. The Commission has an important role in prescribing rules that establish technical standards for EAS, procedures for participating entities, and EAS testing protocol.

CAP will enable us develop a more secure, reliable, interoperable and integrated multi-platform EAS network that better serves the needs of the originating source, public safety, EAS participating entities and, perhaps more importantly, the targeted communities who may be in the path of danger. Even more hopeful is the potential for CAP to develop a digital alert system which would better serve the needs of people with disabilities. For instance, CAP-formatted messages could provide the same alert in text, aural, and video formats. EAS message originators and participants should remember that everyone deserves the same information. Therefore, the exact transcription of an audio alert should be the standard once CAP is adopted.

I am, however, disappointed that this *Report* does not resolve EAS and general emergency information access concerns of non-English speaking and multi-lingual communities.

But at least today's item and the *Further Notice* provide a framework for the Commission, for the first time, to assemble all stakeholders – broadcasters, state officials, FCC Public Safety staff and representatives of non-English speaking communities. According to the Census Bureau, there are over 14 million U.S. households in which people speak a language other than English. One in five people over age five speaks a language other than English. Access to multi-lingual emergency information should have been a priority issue fully addressed and resolved in today's item. I am hopeful that, once and for all, the Commission will pay serious attention to this important concern.

It is worth remembering, though, that Commission could impose countless mandates and requirements, but the effectiveness of EAS still rests on the good-faith of all participating entities and governmental agencies involved in our national, state and local alert system. Accordingly, collaboration, communication and cooperation must be routine – not a single event. I strongly encourage the FCC's Public Safety and Homeland Security Bureau to remain sincerely engaged, and to encourage collaboration among all stakeholders to develop policies, plans, and procedures to address the emergency readiness needs of all communities.

Thus far, I am heartened by the efforts of the National Association of Broadcasters and the Minority Media and Telecommunications Council for acting on my request to begin talking about a multi-lingual EAS solution in advance of the meetings that the Bureau is required to facilitate in the coming weeks. It is my firm belief that these leaders, who are trying to reach agreement in good-faith, should be able to find common ground on an issue of this importance.

STATEMENT OF
COMMISSIONER DEBORAH TAYLOR TATE

Re: *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,* EB Docket No. 04-296.

The dissemination of vital information and interoperable communications are the backbone of our defense against natural disasters, attacks on our homeland, and even the possibility of a pandemic, health-related, or environmental attack. The truth of this statement was driven home just a few weeks ago in Greensburg, Kansas, where National Oceanic and Atmospheric Administration forecasters were able to use the Emergency Alert System (EAS) to issue a tornado warning a full 39 minutes before the 1.7 mile wide wedge tornado hit the town, followed by a Tornado Emergency message 10-12 minutes before the twister hit urging residents to get to shelter immediately. As tragic as the results of that storm were, residents of Greensburg and emergency response officials say that those warnings saved countless lives.

The steps the Commission takes today to improve and enhance the EAS are important ones, and will make the system even more effective. I am proud to play a small role in helping to ensure that the President, the National Weather Service, and state governors or their designees will be able to rapidly communicate with our citizens in times of crisis over a variety of communications platforms.

STATEMENT OF
COMMISSIONER ROBERT M. MCDOWELL

Re: *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,* EB Docket No. 04-296.

In this Order, we take steps to increase the reliability, security and efficacy of the nation's Emergency Alert System (EAS) network to enable federal and state authorities to rapidly communicate with the public in times of crisis. Specifically, we: require EAS participants to accept messages using Common Alerting Protocol (CAP) when CAP is approved by FEMA; require common carriers providing video service to participate in EAS as broadcasters and cable and satellite providers already do; and permit the transmission of state-level EAS alerts that are originated by governors or their designees. This Order establishes a framework for the next generation of EAS, which through innovative technologies will provide a redundant, more resilient system for delivering emergency alerts. The upgraded EAS that CAP will enable also will ensure better outreach to all Americans, including non-English speakers and persons with hearing and vision disabilities.

As recent history has shown us, rapid response and warning systems are vital to the safety and security of the public in emergencies, whether the threat is an act of God or man-made. Americans tune in to their radios and televisions for the information they need in such critical times. Our actions today harness the capabilities offered by new technologies to improve the EAS system for the benefit of the public, particularly those who have been harder to reach.

I thank the Bureau for their hard work and I support this Order.