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

In the Matter of	)	
Review of the Emergency Alert System	)	EB Docket No. 04-296

NOTICE OF PROPOSED RULEMAKING

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By the Commission: Chairman Powell and Commissioners Abernathy, Copps, Martin, and Adelstein issuing separate statements.

I. INTRODUCTION

1. This Notice of Proposed Rulemaking (NPRM) examines the Emergency Alert System (EAS), and seeks comment on whether EAS in its present form is the most effective mechanism for warning the American public of an emergency and, if not, on how EAS can be improved. This NPRM is the most recent in a series of proceedings in which the Federal Communications Commission (Commission) has sought to contribute to an efficient and technologically current public alert and warning system.[1]

[1] *See Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System*, Report and Order, 17 FCC Rcd 4055 (2002) (*2002 Report and Order*); *Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System*, Notice of Proposed Rulemaking, 16 FCC Rcd 7255 (2001); *Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Second Further Notice of Proposed Rulemaking, 13 FCC Rcd 6353 (1998); *Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Third Report and Order, 14 FCC Rcd 1273 (1998); *Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Second Report and Order, 12 FCC Rcd 15503 (1997) (*Second Report and Order*); *Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Report and Order and Further Notice of Proposed Rulemaking, 10 FCC Rcd 1786 (1994) (*First Report and Order*), *reconsideration granted in part, denied in part*, 10 FCC Rcd 11494 (1995) (*Memorandum Opinion and Order*); *Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 7 FCC Rcd 6903 (1992); *Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Notice of Inquiry and Notice of Proposed Rulemaking, 6 FCC Rcd 6739 (1991); *Inquiry into Possible Technical Improvements in the Emergency Broadcasting System*, Notice of Inquiry, 6 FCC Rcd 4264 (1991).

2. Since the tragic events of September 11, 2001, an expanding circle of interested parties, including individual citizens, public/private groups, and our federal, state, and local partners, have raised issues about the efficacy of EAS as a public warning mechanism. Some of these issues are rooted in the fact that EAS mandates only delivery of a "Presidential message."[2] The Commission's EAS rules primarily are concerned with the implementation of EAS in this national role.

3. Along with its primary role as a national public warning system, EAS and other emergency notification mechanisms, are part of an overall public alert and warning system, over which the Federal Emergency Management Agency (FEMA) exercises jurisdiction. EAS use as part of such a public warning system at the state and local levels, while encouraged, is merely voluntary.[3] Thus, although Federal, state, and local governments, and the consumer electronics industry have taken steps to ensure that alert and warning messages are delivered by a responsive, robust and redundant system,[4] the permissive nature of EAS at the state and local level has resulted in an inconsistent application of EAS as an effective component of overall public alert and warning system. Accordingly, we believe that we should now consider whether permissive state and local EAS participation is appropriate in today's world.

4. There are similar questions about the technical capabilities of EAS. For example, since it relies almost exclusively on delivery through analog radio and television broadcast stations and cable systems, is EAS, in the current communications universe, outdated? How could it be made more efficient? Should it be phased out in favor of a new model? If so, what would the new model look like? If a new model were to be adopted, what legal and practical barriers would have to be overcome to ensure its implementation and effectiveness? Would a new model require legislation from Congress or an Executive Order? What technologies should serve as the basis for such a model? Alternatively, should EAS requirements be extended to other services (e.g. cellular telephones)?

5. It is our intention in this proceeding to seek comment on these and an array of other questions and potential rule changes. We have already begun —and will continue throughout this proceeding — to coordinate carefully with the Department of Homeland Security (DHS), its component, FEMA, and the Department of Commerce and its component, the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS). We anticipate these federal partners will be active participants in the proceeding. In addition to seeking comments from all interested individuals and federal entities on the issues raised in this NPRM, we also specifically seek the participation of state and local emergency planning organizations and solicit their views. Finally, we seek input from all telecommunications industries concerned about developing a more effective EAS.

II. BACKGROUND

A. History of EAS

6. In 1951, during the Korean War, President Harry S. Truman established CONELRAD (Control of Electromagnetic Radiation), the first national warning system, to provide a means for the President to address the American people, to provide attack warning, and to supply emergency information.[5] Under CONELRAD, designated AM radio stations operated on 640 or 1240 kHz during an

[2] 47 C.F.R. § 11.44.

[3] 47 C.F.R. § 11.1.

[4] *See, e.g., NOAA News Release,* Homeland Security Uses NOAA All-Hazards Network For Alerts And Warnings (June 17, 2004); *CEA News Release*, CEA Welcomes DHS and NOAA Public Alert Memorandum of Agreement (June 17, 2004)*; see also Pennsylvania Emergency Alert System State EAS Plan (2004).*

[5] *Providing for Emergency Control Over Certain Government and Non-Government Stations Engaged in Radio Communication or Radio Transmission of Energy*, Exec. Order No. 10,312, 51 Fed. Reg. 14,769 (1951).

emergency alert so that enemy missiles or bombers could not use broadcast transmissions of other stations as a guide to their targets. CONELRAD had a simple system for alerting the public and other "downstream" stations; the alerting system consisted of a sequence of shutting the station off for five seconds, returning to the air for five seconds, again shutting down for five seconds, and then transmitting a tone for 15 seconds.

7. In 1963, President John F. Kennedy replaced CONELRAD with the Emergency Broadcast System (EBS), a system that allowed all broadcast stations to continue operating on their assigned frequencies during an emergency.[6] The EBS was an analog transmission system which required broadcasters to install specified equipment, and relied upon these broadcasters to control the system.[7] Technical requirements for EBS equipment were developed during the 1960s, and the Commission did not amend its rules to replace the CONELRAD signaling technique with the EBS audio signal until the mid-1970s.

8. In 1994, the Commission adopted rules that replaced EBS with EAS (described in further detail below) and, consistent with a statutory requirement,[8] required cable systems as well as broadcast stations to install EAS equipment and participate in national alerts and required testing.[9] In 1997, the Commission extended EAS requirements to wireless cable systems, with the qualified support of that industry.[10]

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[6] *Assigning Emergency Preparedness Functions to the Federal Communications Commission*, Exec. Order No. 11,092, 63 Fed. Reg. 2216 (1963).

[7] *See Amendment of Section 73.906 of the Commission's Rules to Substitute a Two-Tone Attention Signal for the Carrier-Break and 1,000 HZ Signal Presently in Use*, Order, 49 FCC 2d 1160 (1974). By transmitting the frequencies 853Hz and 960Hz simultaneously, the new EBS equipment produced an audio/analog two-tone alerting signal which was broadcast by stations on the main audio channel. This two-tone signal served the dual purpose of getting the listener's attention and activating other EBS equipment in the surrounding area. The EBS station operator then listened to the audio message coming out of the speaker of the decoder/receiver to determine the reason the EBS signal had been transmitted, and acted accordingly. The EBS initially focused on the distribution of national level emergency information, however, in 1976, the Commission, FEMA, and the NWS endorsed the use of the two-tone EBS audio signal during state and local emergencies. *See State and Local Emergency Broadcasting System (EBS) Memorandum of Understanding Among the Federal Emergency Management Agency (FEMA), Federal Communications Commission (FCC), and the National Oceanic and Atmospheric Administration (NOAA)*, (June 28, 1976).

[8] Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 16(b), 106 Stat. 1460, 1490 (1992). Section 624(g) 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 ...." 47 U.S.C. § 544(g).

[9] *See First Report and Order*, 10 FCC Rcd at 1786; *see also* Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, § 16(b), 106 Stat. 1460, 1490 (1992).

[10] *See Second Report and Order*, 12 FCC Rcd at 15503. For purposes of the EAS rules, a "wireless cable system" is a collection of Multipoint Distribution Service, Multichannel Multipoint Distribution Service or Instructional Television Fixed Service channels used to provide video programming and other one-way and two-way communications services to subscribers. The channels may be licensed to or leased by wireless cable system operators. *See* 47 C.F.R. § 11.11(c)(1). Hereafter, use of the term "cable systems" and "cable operators" includes wired and wireless cable systems unless specifically stated otherwise. As part of its ongoing efforts to promote the deployment of wireless broadband services, the Commission recently adopted revisions that transform the rules governing MDS/MMDS (renamed the "Broadband Radio Service") and ITFS to provide greater flexibility and a more functional band plan for licensees. *See Amendment 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the*

B. Federal/State Program Responsibility

9. The Commission, in conjunction with FEMA and the NWS, implement EAS at the federal level. The respective roles currently are based on a 1981 Memorandum of Understanding between FEMA, NWS, and the Commission,[11] on a 1984 Executive Order,[12] and on a 1995 Presidential Statement of Requirements.[13] In addition, State Emergency Coordination Committees (SECCs) and Local Emergency Coordination Committees (LECCs) develop state and local EAS plans.

10. The Commission. The Commission's authority to regulate emergency broadcasting emanates primarily from sections 1, 4(i) and (o), 303(r), and 706 of the Communications Act of 1934, as amended, (Act).[14] Section 1 of the Act states that the Commission was created for the purposes of, *inter alia*, national defense and promoting safety of life and property through the use of wire and radio communication.[15] In section 4(i), there is a general grant of authority to perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with the Act, as may be necessary in the execution of the Commission's functions. Section 4(o) provides the Commission with authority to investigate, study, and propose best methods to resolve any and all problems preventing the maximum effective use of radio and wire communications in connection with safety of life and property. Section 303(r) is a general grant of rulemaking authority to the Commission. 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.

11. Commission authority to regulate participation by cable systems in the emergency alerting process stems primarily from section 624(g) of the Act.[16] That provision requires the Commission to ensure that cable viewers are afforded the same access to emergency communications as

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2150-2162 and 2500-2690 MHz Bands, WT Docket No. 03-66, Report and Order and Further Notice of Proposed Rulemaking, FCC 04-135 (rel. July 29, 2004).

[11] *See State and Local Emergency Broadcasting System (EBS) Memorandum of Understanding Among the Federal Emergency Management Agency (FEMA), Federal Communications Commission (FCC), and the National Oceanic and Atmospheric Administration (NOAA)* (Approved by National Industry Advisory Committee (NIAC) on April 21, 1982). Note that NIAC was chartered in 1963 to advise and assist the Commission in executing its emergency preparedness responsibilities. *See supra* note 6.

[12] The 1984 Executive Order addressed the assignment of national security and emergency preparedness functions relating to telecommunications, specifically stating that the Director of FEMA shall "[d]evelop, upon request and to the extent consistent with law and in consonance with regulations promulgated by and agreement with the Federal Communications Commission, plans and capabilities for, and provide policy and management oversight of, the Emergency Broadcast System, and advise and assist private radio licensees of the Commission in developing emergency communications plans, procedures and capabilities." *Assignment of National Security and Emergency Preparedness Telecommunications Functions*, Exec. Order No. 12,472, 49 Fed. Reg. 13,471 (1984).

[13] In a 1995 Presidential Statement of Requirements, President William J. Clinton addressed presidential communications with the general public during periods of national emergency; *see Presidential Communications with the General Public During Periods of National Emergency,* The White House (September 15, 1995)*(1995 Presidential Statement of Requirements)*.

[14] 47 U.S.C. §§ 151, 154(i) and (o), 303(r), 606.

[15] 47 U.S.C. § 151.

[16] 47 U.S.C. § 544(g).

broadcast viewers and listeners. Additionally, the Americans with Disabilities Act,[17] strives to make all facets of our society fully accessible to individuals with disabilities.[18]

12. In general, the Commission's rules prescribe: (1) technical standards for the EAS; (2) procedures for radio and television broadcast stations and cable systems to follow in the event EAS is activated; and (3) EAS testing protocols. Under the rules, national activation of the EAS for a Presidential message with the Emergency Action Notification event code is designed to provide the President the capability to transmit within ten minutes from any location at any time, and must take priority over any other message and preempt other messages in progress.[19] As noted, use of the EAS by state or local governments to initiate warnings and the broadcast and transmission of other-than-Presidential alerts by broadcasters and cable systems is voluntary.[20] The rules mandate EAS obligations only for analog radio and television stations, and wired and wireless cable television systems.[21] Other systems, including, for example, low earth orbit satellite systems, paging, direct broadcast satellite (DBS), digital television (DTV), satellite Digital Audio Radio service (satellite DARS), and In-Band-On-Channel Digital Audio Broadcasting (IBOC DAB) currently have no EAS requirements.[22]

13. FEMA. Activation of the national-level EAS rests solely with the President. The Stafford Act[23] authorizes the President to make provisions for emergency preparedness communications and dissemination of warnings to governmental authorities and the civilian population in areas endangered by disasters.[24] This authority has been delegated to DHS' Undersecretary for Emergency Preparedness and Response as director of FEMA. FEMA acts as the White House's executive agent for the development, operations, and maintenance of the national level EAS and is responsible for implementation of the national level activation of EAS, tests, and exercises.

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[17] Americans with Disabilities Act, (ADA), Pub. L. No. 101-336,104 Stat. 327 (1990); H.R. Rep. No. 485, Pt. 2, 101st Cong., 2d Sess. (1990) (House Report).

[18] *See also Individuals with Disabilities in Emergency Preparedness*, Exec. Order No. 13,347, 69 Fed. Reg. 44,573 (2004).

[19] 47 C.F.R. § 11.44(a).

[20] *See* 47 C.F.R. § 11.55(a); *see also 2002 Report and Order,* 17 FCC Rcd at 4057; *First Report and Order*, 10 FCC Rcd at 1809.

[21] Amateur radio operators play an important role in providing emergency communications, but are not subject to mandatory EAS obligations. *See* 47 C.F.R. § 97.1(a).

[22] These services are among the evolving digital technologies that bring advanced services to consumers and make more efficient use of the available spectrum. DBS service, including the Direct-to-Home Fixed-Satellite Service (DTH-FSS), provides multi-channel video programming services to millions of households. DTV is a type of broadcasting technology that allows broadcasters to offer television with movie-quality picture and CD-quality sound, along with a variety of other enhancements that can be used to transmit large amounts of other data into the home, which may be accessible by using a computer or television set. DAB technology utilizes new and efficient audio compression techniques that reduce the amount of bandwidth required to transmit a high-quality audio signal. Finally, IBOC systems are designed to simultaneously broadcast both analog and digital radio signals on broadcasters' existing AM and FM frequencies without disrupting existing analog service. *See* FCC Public Release*, FCC Commences Rulemaking To Consider Terrestrial Digital Audio Broadcasting* (November 1, 1999). We note that on April 20, 2004, the Commission tentatively concluded that IBOC systems are subject to the same EAS and other emergency broadcast rules as are AM radio stations. *See infra* para. 29.

[23] Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. § 5121, *et. seq*. As a result of the Stafford Act, twenty-seven Federal departments and agencies signed an agreement concerning Federal response and assistance to State and local governments when a major disaster or emergency overwhelms their ability to respond.

[24] *See* National Operations Warning System Operations Manual, FEMA Manual 1550.2 at 1-2, March 30, 2001, <http://www.fema.gov/pdf/library/1550_2.pdf>.

14. NOAA. As the originator of emergency weather information, NOAA, through its component agency, the NWS, plays a significant role in the implementation of EAS at the state and local level.[25] Through its All-Hazards Network, NWS originates approximately 80 percent of all EAS alerts.[26] The NWS supplies local alerts to broadcast and cable entry points designated in approved EAS state and local plans.[27] Many broadcast stations and cable systems also directly monitor NWS transmissions and relay the NWS messages to their audiences over EAS.[28] In order to ensure that there is equipment interoperability between EAS and NWS Specific Area Message Encoding (SAME) technology used by NOAA Weather Radios, the Commission's rules specifically provide that EAS event codes must be compatible with the codes used by the NWS SAME encoder.[29]

15. SECCs and LECCs. State Emergency Communications Committees (SECCs) and Local Emergency Communications Committees (LECCs), comprised of emergency management personnel and volunteers from industry, may be established in each state and territory to prepare coordinated emergency communications systems and to develop state and local emergency communications plans and procedures for EAS and other Public Alert and Warning (PAW) systems the state may use in combination with EAS. These committees also establish an authentication procedure and establish the date and time of the required monthly EAS tests.

C. EAS Structure and EAS Codes

16. Primary Entry Points (PEPs). The EAS is essentially a hierarchal, trickle down distribution system.[30] FEMA has designated 34 radio broadcast stations as Primary Entry Point (PEP)

[25] NWS broadcasts NWS forecasts, warnings, watches, and other non-weather related hazard information 24 hours a day. During an emergency, NWS sends out a special tone that activates any NOAA Weather Radio, a specialized consumer electronic device, in the listening area. Using the Specific Area Message Encoding (SAME) technology, NOAA Weather Radios can be programmed to receive information specific to a certain area and, if equipped with a special alarm tone feature, can sound an alert and provide immediate information. Working with other federal agencies and EAS, NWS is an all-hazards radio network that broadcasts warnings and post-event information for all types of hazards, including weather, natural, technological, and national emergencies. *See* <http://www.nws.noaa.gov/nwr/allhazard.htm>. On June 17, 2004, the Information Analysis and Infrastructure Protection Directorate of DHS signed an agreement with NOAA to allow DHS to send critical all-hazard alert and warnings directly through the NOAA All-Hazard Network. *See DHS News Release,* Homeland Security Leverages NOAA All-Hazards Network for Alerts and Warnings (June 17, 2004). Local NWS offices provide NWS alerts and broadcast non-weather related emergency messages provided to them directly by local and state government officials. For non-weather emergencies, the system is activated by the NWS at the request of local and/or state officials.

[26] This number will likely increase due to the agreement between DHS and NOAA. *See id.*

[27] NWS also operates NOAA Weather Wire Service (NWWS), a satellite data collection and dissemination system. *See* <http://www.nws.noaa.gov/nwws/description.htm>. The purpose of NWWS is to provide state and federal government, commercial users, media, and private citizens with timely delivery of meteorological, hydrological, climatological, and geophysical information from 141 NWS offices and the U.S. Geological Survey's national Earthquake Information Center. NWWS delivers severe weather and storm warnings to users in 10 seconds or less from the time they are issued. NWWS can be received via C-band satellite, Ku-band satellite, or over the Internet. All three options require a personal computer and appropriate software. NWWS can activate the EAS or provide warning information for non-EAS broadcast. *See A National Strategy for Integrated Public Warning Policy and Capability, Partnership for Public Warning Report* 2003-01 at 12 (May 16, 2003) (*PPW May 2003 Report*).

[28] The Commission has encouraged the monitoring of NWS transmissions. *See First Report and Order*, 10 FCC Rcd at 1810-11. All EAS decoders are able to directly monitor and decode NWS SAME codes with the addition of any ordinary weather radio receiver and off-the-shelf connections to the EAS decoder.

[29] 47 C.F.R. § 11.31(c).

[30] All broadcast stations and cable systems have EAS designations that describe their functions within EAS. *See* 47 C.F.R. § 11.18.

stations. At the request of the President, FEMA distributes "Presidential Level" messages to these PEP stations.[31] As the entry point for national level EAS messages, the PEP stations have a National Primary (NP) EAS designation, and are monitored in turn by other stations in the hierarchical chain.

17. The United States is divided into approximately 550 EAS local areas, each containing a key EAS source, called the Local Primary One (LP-1). The LP-1 monitors its regional PEP station for Presidential messages, and serves as the point of contact for local authorities and NWS officials to activate EAS. Other stations and cable systems in the area monitor their LP-1 station, and if a Presidential message is sent, they are required to air the message received from their LP-1 station. For non-Presidential messages, these monitoring stations and cable systems may carry the message at their discretion. Local Primary sources are assigned numbers in the sequence they are to be monitored by other broadcast stations in the local area (*i.e.*, LP-1, 2, 3, etc.). Broadcast stations and cable systems are required to monitor at least two EAS sources for Presidential alerts, as specified in their state EAS plans.[32] As we discuss in paragraph 31 below, however, the number of households that actually are watching or listening to these broadcast and cable outlets at any point in time is often relatively small.

18. State and local emergency operations managers can request activation of EAS for state and local public alert and warning. State-level EAS entry points are designated as State Primary and State Relay.[33] State Primary Entry Points can be broadcast stations, state emergency operation centers, or other statewide networks, and can act as sources of EAS state messages originating from the State Governor or a State Emergency Operations Center. State Relay sources relay state common emergency messages into local areas.[34] Local Primary sources are responsible for coordinating the carriage of common emergency messages from sources such as the NWS or local emergency management offices as specified in EAS local area plans.[35]

19. EAS Codes. Initiating an EAS message, whether at the national, state, or local level, requires the broadcaster, cable operator or emergency administrator to enter certain codes into dedicated EAS equipment.[36] EAS equipment also provides a method for automatic interruption of regular programming and is capable of providing warnings in the primary language that is used by the station or cable system.[37] The EAS protocol, including any codes, may not be amended, extended or abridged without Commission authorization.[38] EAS header codes identify the party that originated the emergency message, the nature of the event or emergency, the location of the emergency, and the valid time period of

[31] 47 C.F.R. § 11.14.

[32] 47 C.F.R. §§ 11.21, 11.52(d). The broadcast stations and cable systems must monitor at least two EAS sources to reduce the likelihood of a single point of failure preventing an EAS message from propagating through the system.

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

[34] 47 C.F.R. § 11.18(d).

[35] 47 C.F.R. § 11.18(b).

[36] 47 C.F.R. § 11.31. EAS messages enter the EAS system via equipment that is able both to encode and decode EAS messages, often called an ENDEC unit. EAS equipment sends and receives messages using a precise format referred to as the EAS digital protocol. An emergency activation of EAS uses a four part message: (1) preamble and EAS header codes; (2) audio attention signal; (3) message; and (4) preamble and EAS end of message codes. *See* 47 C.F.R. § 11.31(a).

[37] 47 C.F.R. §§ 11.33(a)(4), 11.51(k)(1), 11.54.

[38] 47 C.F.R. § 11.31(c).

the message. The national level EAS activation audio message is unrestricted in length. However, for state and local implementation of EAS, the audio portion is restricted to two minutes.[39]

III. DISCUSSION

A. General Considerations

20. The main objective of this NPRM is to seek comment on whether EAS as currently constituted is the most effective and efficient public warning system that best takes advantage of appropriate technological advances and best responds to the public's need to obtain timely emergency information. We also seek comment on rules that the Commission may adopt to enhance the effectiveness of EAS. One of the central issues on which this NPRM seeks comment is the current efficacy of EAS in an age when the communications landscape has evolved from what it was when EAS predecessors—and EAS itself—were originally conceived.

21. We note initially that two public/private partnerships have studied and addressed this issue extensively. The Media Security and Reliability Council (MSRC) is an industry-led Federal Advisory Committee created by the Commission and comprised of leaders from the radio, television, multi-channel video, public safety and disabled communities. [40] The Partnership for Public Warning (PPW) was incorporated in January 2002 as a not-for-profit public-private partnership, whose goal is to promote and enhance effective, integrated dissemination of public warnings and related information that will save lives, reduce losses and speed recovery from acts of terrorism, accidents and natural disasters.[41] Both PPW and MSRC advocate upgrading, not replacing, EAS.[42] In particular, PPW asserts that any new public warning system design should take advantage of the existing EAS infrastructure and should be able to accommodate existing EAS equipment in place, noting that it would be difficult to replace or rebuild such a capability today at a reasonable cost.[43] In responding to the general issue of the EAS system's future viability, as well as other issues raised in this NPRM, we encourage commenters to take into account MSRC's and PPW's recommendations.

B. Federal/State Program Responsibility

22. PPW has recently recommended that a single federal entity, specifically DHS, should take the lead in creating and overseeing an effective national public warning program.[44] PPW also noted that DHS, with other federal agencies and stakeholders, should update and clearly designate EAS management, operational and oversight responsibilities among the appropriate federal agencies and other

[39] 47 C.F.R. § 11.31(a)(3)(i).

[40] MSRC was formed following the events of September 11, 2001, to study, develop, and report on Best Practices designed to ensure the continued operations and security of media facilities in times of a national emergency. *See* FCC News Release, *FCC Announces Creation of Media Security & Reliability Council; Tribune Company President Dennis Fitzsimons To Be Chairman*, (rel. Mar. 28, 2002).

[41] PPW is governed by an elected Board of Trustees representing local and state governments, private industry and the non-profit community. Federal agencies participating in PPW include the Department of Homeland Security, Department of Commerce and the Federal Communications Commission. *See* <http://www.PartnershipForPublicWarning.org>.

[42] *Partnership for Public Warning*, The Emergency Alert System (EAS): An Assessment, Partnership for Public Warning, 30 (February 2004) (*PPW 2004 EAS Assessment*); *see also Media Security and Reliability Council* Comprehensive Best Practices Recommendations, Media Security and Reliability Council, 11-12 (March 2004) (*MSRC March 2004 Best Practices Recommendations*).

[43] *PPW 2004 EAS Assessment* at 28.

[44] *Id.* at 4, 30.

authorities.[45] Additionally, MSRC has recommended that a single federal entity should be responsible for assuring: (1) that public communications capabilities and procedures exist, are effective, and are deployed for distribution of risk communication and warnings to the public by appropriate federal, state and local government personnel, agencies and authorities; (2) that lead responsibilities and actions under various circumstances are established at federal, state and local levels within the overall discipline of emergency management; and (3) that a national, uniform, all-hazard risk communication warning process is implemented from a public and private consensus on what best meets the needs of the public, including people of diverse language and/or with disabilities, including sensory disabilities.[46] MSRC and PPW also assert that effective delivery of emergency information to the public should be achieved through a public/private partnership that makes coordinated use of mass media and other dissemination systems.[47] We seek comment on PPW's and MSRC's suggestions. Would legislation be required to effectuate the recommendations described in this paragraph?

23. We seek comment regarding the respective roles of the federal government departments and agencies involved with the implementation of EAS, specifically the Commission, DHS, FEMA and NOAA. Should each of these agencies remain involved? If not, what specific changes in roles should occur? For changes to occur, would the Commission or other federal entity have to recommend that current legal authorities be updated or supplemented?[48] Should a new public/private partnership be created to ensure the effective and efficient delivery of emergency information to the public and, if so, how should this partnership be structured and what should its responsibilities be? What federal agency should be its primary point of contact? Should a particular federal agency take the lead role for the future EAS?

24. We also seek comment about several aspects of state and local EAS. First, we note that some parties assert that voluntary (as opposed to mandatory) participation in state and local EAS alerts impairs the credibility of the entire EAS. They claim that it makes no sense to mandate participation only on a national level in a system that has never issued a Presidential alert and is instead used to deliver vital information about life-threatening local, state, and regional events.[49] These parties believe that the voluntary nature of participation in state and local EAS alerts also makes it difficult to find enough dedicated people to participate with system implementation.[50] As we noted in the *Localism NOI*, the dissemination of emergency information is a critical and fundamental component of broadcasters' local public service obligations,[51] and we accordingly seek comment on whether voluntary participation in EAS

[45] *Id.* at 5.

[46] *MSRC March 2004 Best Practices Recommendations* at 11.

[47] *Id.* at 11; *PPW 2004 EAS Assessment* at 32.

[48] *See supra* paras. 9-12.

[49] *See, e.g., MSRC EAS Survey Results,* MSRC Government Media Subcommittee (May 23, 2003) <http://www.tab.org/eas.php> (*MSRC EAS Survey)*; *see also* Randy J. Stine, *Saving Lives or Wrecking Radio?,* Radio World (April 7, 2004).

[50] *MSRC EAS Survey* at 42.

[51] *Broadcast Localism*, Notice of Inquiry, MB Docket No. 04-233, FCC 04-129, para. 28 (July 1, 2004) (*Localism NOI*). We will incorporate comments on EAS filed in the *Broadcast Localism* proceeding into the record of this proceeding. The Commission's Localism Task Force has also discussed EAS and emergency notification issues in its recent localism hearings in Monterey, California, and Rapid City, South Dakota. *See* FCC News Release, *FCC's Localism Task Force Announces Panelists and Final Agenda for Public Hearing on Broadcast Localism in Monterey, California, July 21, 2004* (rel. July 20, 2004); FCC News Release, *FCC's Localism Task Force Announces Panelists and Final Agenda for Public Hearing on Broadcast Localism in Rapid City, South Dakota, May 26, 2004* (rel. May 24, 2004). For more information about the Localism Task Force, see the Commission's website at <http://www.fcc.gov/localism/>.

is consistent with those obligations. We seek comment on whether the Commission should adopt rules to require broadcasters to make their facilities available to local emergency managers? If so, what should be the nature and scope of any such rules? In their comments, parties should address the issue of whether there would be adverse effects from imposing some uniform requirement on broadcasters rather than allowing them to continue to make voluntary arrangements with local officials? Conversely, should incentives be provided to encourage the participation of broadcasters and cable operators? What incentives could be provided? To avoid what broadcasters and cable operators might view as a burdensome level of program interruptions, should there be a federal rule establishing a standard regarding when state emergency managers may and must activate EAS and, if so, what should that standard be? Should use of any of the existing voluntary EAS codes be mandated? Should the federal government monitor EAS usage to determine a standard?

25. We also seek comment on whether Commission rules that require states with EAS plans to file those plans with the Commission for approval have little impact because Commission rules do not require that states have plans in the first instance. Further, no current guidelines or standards exist for the structure/creation of state or local EAS plans.[52] We seek comment on whether the Commission should adopt rules requiring state and/or local EAS plans. We further seek comment on whether the Commission should establish national guidelines and standards for the structure of such plans? Parties filing comments should consider the following issues: Should there be a specific standard of review, and if so, what should it be? Is the Commission the appropriate agency to undertake this task? Is the SECC and LECC structure the appropriate mechanism for generating such plans? Who should generate such plans? Does the Commission or other federal entity currently have legal authority to require and oversee the development of such plans? Where would enforcement action lie for failure to develop an appropriate plan? Should periodic updating and review of state and local plans be required and, if so, how often? Should adjacent state and local jurisdictions implement standardized EAS plans so that responses to large-scale emergencies that impact more than one state or local area can be better coordinated? Should multi-state regions be defined and plans developed for them? Should there be reporting requirements for EAS activations to facilitate the development of accurate reports?[53]

26. We also seek comment on whether uniform national guidelines are preferred over the disparate manner in which states and localities implement EAS. For example, EAS alerts may be requested by FEMA emergency managers, state and local emergency managers, public safety officials, and other individuals identified in state plans. EAS may also be activated at the state or local level by any AM, FM, or TV station or cable system, at management's discretion, in connection with day-to-day emergency situations posing a threat to life and property. Additionally, broadcasters and cable operators can, but are not required to, monitor the NWS and activate EAS in response to an NWS warning. We seek comment on whether the Commission should adopt rules to require all EAS participants to monitor the NWS where signals are available. Should staff at any broadcast station or cable system continue to be permitted to initiate EAS alerts without concurrence from local or state emergency managers and, if so, should the Commission or some other federal entity establish standards regarding the issuance of public warning by these entities?

C. EAS Structure and EAS Codes

27. The primary method of delivery of Presidential EAS messages to state and local areas is over-the-air broadcast signals that follow a hierarchical structure, beginning with FEMA's relay of the message to the 34 PEP stations, which in turn are monitored by the 550 LP1 and state relay stations,

[52] 47 C.F.R. § 11.21. Commission rules require only that, once created, state and local plans be reviewed and approved by the Director, Office of Homeland Security, Enforcement Bureau, prior to implementation to ensure that they are consistent with national plans, Commission regulations, and EAS operation. *See id.*

[53] *PPW 2004 EAS Assessment* at 30.

which in turn are monitored by over 14,000 broadcast stations and 10,000 cable systems nationwide. However, some emergency managers and SECC members say they lack confidence in the manner in which this system is implemented in their states.[54] They believe stations "down the chain" may miss important state and local messages because, for example, stations that they monitor "up the chain" chose not to air a non-Presidential message or are unattended stations that have pre-programmed their EAS equipment to forward only certain event codes. Some claim that this interdependent structure could be problematic even for a national level alert. They believe a non-PEP station may be unable to reliably monitor a signal due to problems with terrain, because it is located in a rural area too far from a PEP station, or because the PEP station's signal cannot cover the large area it is supposed to cover.[55] Some assert that, in any event, the process takes too long to transmit across an entire state.[56] Accordingly, we seek comment regarding how to improve the distribution of emergency alerts, both national and state/local. Should the originating local agencies transmit alerts directly to as many stations and cable systems as possible without intervening relay stations?[57] Should other technologies, such as satellite delivery systems, be used as part of a backbone to distribute the alert to entry points? Given the changes in technology within the broadcasting industry, is there still a need to structure EAS with the PEP system? To the extent that any businesses using such technologies are small businesses, how should that status affect our analysis? As we discussed in paragraph 25 above, could inconsistencies in the manner in which states implement EAS be alleviated by the adoption of national guidelines?

28. In the *2002 Report and Order*, the Commission amended Part 11 of the Commission's rules by, *inter alia*, adding new state and local event codes, most of which are for non-weather events such as child abductions (Amber Alerts) and new location codes. The Commission did not mandate the use of these codes. Rather, effective May 16, 2002, broadcast stations and cable systems could upgrade their existing EAS equipment to add the new codes on a voluntary basis until the equipment is replaced.[58] All models of EAS equipment manufactured after August 1, 2003, had to be capable of receiving and transmitting the new codes.[59] Broadcast stations and cable systems that replace their EAS equipment after February 1, 2004, must install equipment that is capable of receiving and transmitting the new event codes.[60] We seek comment regarding whether circumstances have changed such that the Commission should adopt rules that require broadcasters and cable operators to upgrade their EAS equipment so that it is capable of receiving and transmitting all current event and location codes, including those adopted in the 2002 Report and Order. If such upgrading of EAS equipment should be required, how much time should broadcasters and cable operators have to replace their EAS equipment? How will this impact small cable operators and broadcasters? Should the government fund upgrades for small systems to mitigate the burden?

[54] *E.g., see generally MSRC EAS Survey*.

[55] Comments can address methods by which emergency managers address particular PEP problems. For example, Michigan was granted a FEMA Hazard Mitigation Grant in 2002 to help solve EAS relay problems and developed a hybrid Internet/satellite relay system in 2003. *See MSRC EAS Survey* at 72.

[56] *Id.*

[57] In an article arguing that this should be done, the author noted that redundant wired and wireless links are not that expensive to implement and maintain between 911 centers and electronic media outlets in population centers. *See* Guy Wire, *Overhauling EAS*, Radio World (February 24, 2004).

[58] 47 C.F.R. § 11.31(e)-(f).

[59] *Id*.

[60] *Id*.

D. Expanding EAS Requirements to Other Services

29. In the 1994 *First Report and Order* on EAS**,** the Commission encouraged - but did not require - EAS participation by digital broadcasters.[61] In the *Localism NOI*, however, we noted that digital technologies have evolved, and can allow broadcasters to provide emergency information in innovative ways.[62] For example, using digital technology, broadcast stations can pinpoint specific households and neighborhoods at risk, with minimal burden on the available spectrum.[63] Accordingly, we seek comment on how digital technology can be used to enhance warnings, and to what extent broadcast stations currently make use of that technology. We also recently reached the tentative conclusion that EAS rules should apply to all audio streams broadcast by a radio station, such as IBOC.[64] We seek comment on whether we should adopt rules extending EAS obligations to other digital broadcast media, such as DBS, DTV, and satellite DARS services. Commenters should also address whether, when television stations turn off their analog signals as part of the DTV transition, they could leave a market devoid of an EAS participating broadcaster? Is digital cable television service treated in the same regulatory fashion as is "over the air" digital broadcast? If so, should the Commission extend EAS obligations to digital cable television? Does it continue to serve the public interest to exempt services that reach increasingly larger portions of the American public from any requirement to provide public warning? What burdens would extending the obligations place on these services, and do the benefits outweigh the burdens? For example, if DBS satellites were required to carry EAS, what effect would inclement weather have on their ability to send signals. Further, if an EAS alert needed to be sent to an area on the border of a DMA, where a DBS provider only provided local-into-local service in one DMA, satellite customers in the unserved DMA would not receive the signal. How would an EAS signal be fed to a DBS operator? While it could be sent over fiber to their local receive facility (LRF) where they offer local-into-local service, they would not have an LRF where they don't provide local-into-local service. Similarly, how would DBS operators conduct testing, particularly on a national v. local level? Finally, to the extent that software updates were needed in set top boxes, what would be an appropriate implementation time frame? What about legacy boxes that have already been deployed? Satellite DARS serves the public primarily on a nation-wide, rather than regional, basis. Does this distribution structure affect the ability of satellite DARS licensees to discharge EAS obligations effectively? If the national distribution of satellite DARS services limits the ability to discharge state and local EAS obligations, are such limitations technological or regulatory in nature?

30. We seek comment generally on what is needed to extend EAS obligations to digital broadcasting, whether this step should be taken regardless of other alternatives, and the timing of any such extension. Digital broadcast services such as DTV and DAB have the ability to transmit more than one program stream on their assigned channel (multicasting). Should DTV broadcasters be required to transmit EAS messages on all program streams?[65] Should they transmit EAS messages only on one stream and force-tune receivers to that stream?[66] What percentage of receivers in the public have the

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[61] *See generally First Report and Order*.

[62] *See Localism NOI*, FCC 04-129 at para. 29 (citing *Public Interest Obligations of TV Broadcast Licensees,* Notice of Inquiry, 14 FCC Rcd 21633, 21642 (1999)).

[63] *Id.*

[64] *See Digital Audio Broadcasting Systems and their Impact on the Terrestrial Radio Broadcast Service*, MM Docket No. 99-325, Further Notice of Proposed Rulemaking and Notice of Inquiry, 19 FCC Rcd 7505, 7519 (2004).

[65] We note in this regard that the Association of Public Television Stations (APTS) has initiated a "Datacasting" project whereby EAS and other emergency notifications can be carried on the digital television bit stream. *See* Jeffrey Davis et al., *Public Digital Television: Improving Homeland Security*, The Association of Public Television Stations, 4, June 2003 < http://www.apts.org/html/homeland/hswhitepaper.pdf>.

[66] "Force tuning" technology allows a cable operator to switch subscribers from any programmed channel to a specific system channel that will carry EAS messages.

ability to be force tuned? IBOC DAB broadcasters typically use the digital part of their signal to replicate their analog programming. In that case, should EAS messages be carried on the analog, the digital, or both program streams? If an IBOC broadcaster chooses to transmit a different program on their digital stream, how should EAS messages be carried? Do IBOC receivers have the ability to be force tuned? The IBOC signal also has the ability to carry text data to be displayed by the receiver. Should a textual alert be part of the EAS message sent by the IBOC broadcaster? How should other multicasting services, such as digital cable, be treated with regards to EAS messages and forced tuning?

E. Alternate Public Alert and Warning Mechanisms

31. In creating EAS, the Commission sought to design a public alert and warning system that would function seamlessly with many sources of emergency communications.[67] The Commission wished to avoid limiting EAS to a particular transmission system, so it adopted a mandatory standard digital protocol with a flexible architecture that the Commission believed could be used by many kinds of transmission media, encompass new technologies, and be expanded and upgraded as new kinds and generations of transmission systems became available.[68] Despite this intended technical flexibility, EAS, as currently constituted, reaches the very limited audience listening to broadcast radio or watching broadcast or cable television at the time the emergency announcement is made. The most ubiquitous outlet for EAS is radio.[69] However, on average, Americans listen to the radio for only about an hour and a half a day, primarily between 6:00 a.m. and 6:00 p.m.[70] Even fewer people are reached by television. Although more than 98 percent of households in the United States have at least one television, the average set is in use only 31 percent of the day.[71] We seek comment on whether this level of penetration is sufficient to comprise an effective public warning system.[72] If it is not, what level of penetration should we seek and what is the best mechanism for reaching that goal?

32. Because EAS relies almost exclusively on delivery through analog radio and television broadcast stations and cable systems, is EAS, in the current communications universe, outdated? Instead, should there be a concerted government/industry effort to combine EAS with alternative public alert and warning systems (APAWS) to form a comprehensive national public warning system capable of reaching virtually everyone all the time? The possibilities are numerous and varied. Several companies offer landline-based interactive notification systems that would convey national, regional, and local emergency messages via the public switched telephone network to wireline telephone subscribers located in the specific geographic areas affected by emergencies.[73] Other companies offer systems that use Internet and/or cellular capabilities, including the cell broadcast feature of digital cellular networks, to deliver alerts to mobile handsets of wireless subscribers or to televisions, cable boxes, clock radios, cars,

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[67] *First Report and Order*, 10 FCC Rcd at 1796, 1799.

[68] *Id*. at 1799-1800.

[69] *PPW 2004 EAS Assessment* at 22 (citing Radio Advertising Bureau statistics).

[70] *Id.* at 21 (citing Arbitron 2001 Radio Today).

[71] *Id.* at 21 (citing Nielsen Media Research, 2000 Report on Television).

[72] Although EAS decoders can be built into a variety of electronic devices that would enable them to receive EAS alerts and activate devices even when they are not turned on, relatively few companies are producing such devices. *See PPW 2004 EAS Assessment* at 30. Further, although NWS signals are accessible to 95 percent of the American population in the fifty states, Puerto Rico, the Virgin Islands, Guam, and the Mariana Islands, a recent national survey of 1,000 people concluded that, depending on the region of the country, only between eight and 13 percent of United States households have NWS receivers and less than half of those receivers are portable. *See PPW May 2003 Report* at 14-15 (citing eBrain.Consumer Research for the Consumer Electronics Association, 2002).

[73] *See Dabctom Technologies, Inc., Petition for Rulemaking to Establish Disaster Alert By Telephone System*, Order, 17 FCC Rcd 11452 (2002).

computers, stand alone units or other devices after incorporating patented receiver devices. Some companies offer satellite based warning and messaging systems which use very small aperture terminal networking to provide direct satellite communications. There are also emergency message and warning systems offered on a subscription basis that use computerized calling systems, fax, email, and digital messaging to reach many different types of devices. Some of these systems are used currently by certain states, along with EAS as part of their public alert and warning system. How could a combined warning system that makes use of some or all of the features described here be implemented? Should the Commission require any APAWS to participate in the existing EAS and, if so, which ones and how should they participate? For example, should all APAWS be required to be compatible with the existing EAS protocol? In considering these issues, should our analysis distinguish between wireless systems used primarily for one-versus two-way communication, or point-to-point or multi-point versus broadcast? Commenters should discuss any legal or practical barriers to its implementation and effectiveness, noting whether legislation would be required from Congress or by Executive Order.

33. As an alternative, would the appropriate approach be to integrate EAS into a PAW "system of systems" by adopting and using a single, integrated interface that would link the emergency manager and all emergency notification and delivery systems, regardless of the technology on which a particular system is based? In this regard, we note that the Organization for the Advancement of Structured Information Standards (OASIS), a not-for-profit, international consortium that addresses the development, convergence and adoption of e-business standards, has adopted the Common Alerting Protocol (CAP) as an OASIS standard.[74] CAP is a standardized, non-proprietary, data interchange format that simultaneously disseminates consistent all-hazard emergency alerts or public warning messages over different kinds of communications networks and systems, including those designed for multilingual and special needs populations. The CAP format is compatible with emerging and existing formats, such as web service applications, NWS' SAME, and the EAS protocol and offers a number of enhanced capabilities.[75] Proponents assert that CAP has the potential to increase warning effectiveness and reduce costs and operational complexity by eliminating the need for multiple custom software interfaces to the many APAWS involved in all hazard warning. CAP has also been implemented by several government agencies and private companies, including DHS, NWS, and Comlabs, Inc.[76] We seek comment on whether the CAP could act as an effective interface through which an emergency manager could access multiple emergency notification services, including EAS.

34. MSRC's Future Technologies/Digital Solutions Task Force recommends that the government should coordinate development of a Media Common Alert Protocol (MCAP) which should: (1) be designed to deliver emergency messages via digital networks; (2) flow over all methods of digital transport; (3) be received by all digital receivers; and (4) be optimized for point-to-multi-point networks and devices only. MSRC also suggests that key attributes of the MCAP should be addressability, scalability, interoperability and prioritizing. MSRC recommends that industry organizations and companies should develop standards and specifications for carriage of MCAP on various media.[77] We seek comment on MSRC's recommendation. We are mindful that the availability of particular delivery

[74] CAP has also been endorsed by organizations such as the Partnership for Public Warning, the ComCARE Alliance, and the National Emergency Management Association's Preparedness Committee.

[75] For example, CAP incorporates geospatial elements based on Open GIS Consortium recommendations to permit flexible but precise geographic targeting of alerts; provides for associating digital images and other binary information with alerts; and supports various mechanisms for ensuring message authenticity, integrity and confidentiality where necessary. *See CAP 1.0 - Fact Sheet* (March 1, 2004) <http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=emergency>.

[76] For more information about CAP see <http://www.oasis-open.org/committees/download.php/6334/oasis-200402-cap-core-1.0.pdf> and <http://www.partnershipforpublicwarning.org/ppw/cap.html>.

[77] *MSRC March 2004 Best Practices Recommendations* at 11.

methods may differ in rural and insular areas from more urban areas. We seek comment on any particular needs or considerations we should afford rural areas.

35. Finally, to what extent does an effective public warning system depend on the consumer electronics equipment that receives the warning? MSRC has identified as two primary functionalities of a future warning system the ability of a device (such as a radio or television set) to automatically turn on and tune in to the channel carrying the warning, and the capability of such a device to receive a geographically addressed message (through FIPS or GPS). We note that the technology exists to have consumer electronic devices turn on automatically in the event of an emergency. We note that, as described in paragraph 14 above, NOAA Weather Radios currently supply both these functions. Would mandating the adoption of such technology to other consumer electronic devices enhance the effectiveness of EAS and other PAW systems?

F. Public Warnings and Alerts for Individuals with Disabilities and Individuals for Whom English is a Second Language

36. Notifying Persons with Hearing and Vision Disabilities. Any consideration of best methods to contact the public during an emergency must address the needs of persons with disabilities. It is the policy of the United States for federal agencies to consider persons with disabilities in their emergency preparedness planning.[78] According to the Department of Commerce, one in five Americans is disabled and one in ten is severely disabled.[79] Fifty million people have some type of long lasting condition or disability, three million of whom have sensory disabilities involving sight or hearing.[80]

37. The Commission's commitment to ensuring that persons with disabilities have equal access to public warnings is well documented. For example, in addition to EAS, the Commission requires all distributors of video programming (including local broadcasters, cable operators and satellite television service providers) that provide emergency information to do so in a format that is accessible to persons with hearing and vision disabilities.[81] When emergency information is provided in the audio portion of the programming, critical details about the emergency and how to respond must be provided in a visual format, such as closed captioning, open captions, crawls, or scrolls.[82] Further, emergency information provided by crawls, scrolls or other visual means should not block closed captioning, and closed captioning should not block any emergency information provided by crawls, scrolls, or other visual

[78] *See Individuals with Disabilities in Emergency Preparedness*, Exec. Order (ordering that federal agencies shall also encourage State, local, and tribal governments to consider persons with disabilities in emergency preparedness planning, providing technical assistance, as appropriate, and facilitate cooperation among the branches of government and private organizations and individuals in the implementation of emergency preparedness plans that address the needs of persons with disabilities.).

[79] 1997 US Department of Commerce, CENBR 97-5.

[80] *Id.*

[81] *See* 47 C.F.R. §§ 73.1250, 79.1, 79.2, 79.3; *see also Reminder to Video Programming Distributors of Obligation to Make Emergency Information Accessible to Persons with Hearing or Vision Disabilities*, Public Notice, DA 03-2361 (rel. July 18, 2003). Emergency information is defined as any information that is intended to further the protection of life, health, safety, or property, including information about hazardous weather situations, dangerous community situations such as the discharge of toxic gases or civil disorders, evacuation orders, school closings, or relief assistance. 47 C.F.R. § 79.2(a)(2).

[82] The Commission has adopted technical standards for the display of closed captioning on DTV receivers and rules that require manufacturers of DTV receivers and DTV set-top converters to include DTV closed captioning display functionality in their DTV devices shipped in interstate commerce or manufactured in the United States on or after July 1, 2002. *Closed Captioning Requirements for Digital Television Receivers, Closed Captioning and Video Description of Video Programming, Implementation of Section 305 of the Telecommunications Act of 1996, Video Programming Accessibility*, Report and Order, 15 FCC Rcd 16788, 16790 (2000).

means. Emergency information that is provided in the video portion of a regularly scheduled newscast or a newscast that interrupts regular programming must also be made accessible to persons who are blind or have low vision. If this information is not part of a regularly scheduled newscast or is part of programming that interrupts regular programming (e.g. the emergency information is provided through "crawling" or "scrolling"), then this information must be accompanied by an aural tone. The same information must also be provided in an audible manner that is accessible to persons who are blind or have low vision.[83] Emergency information provided by means other than closed captioning or video description should not block any closed captioning or video description and closed captioning or video description should not block any emergency information provided by means other than closed captioning or video description.[84]

38. We note that section 79.2 of the Commission's rules specifies particular triggering events and methods for emergency transmittal separate from those required by EAS. We seek comment on whether there are disparities in or conflicts between our EAS rules and those contained in section 79.2 that should be reconciled or combined and the manner in which such disparities or conflicts could be resolved in subsequent rules.

39. We also note that the digital and alternative technologies discussed in paragraphs 29 to 30 above may have particular benefits for persons with hearing and vision disabilities. We seek comment on how individuals with disabilities can be notified of EAS activation or other emergency alerts by such means. Such comments should address whether particular technological and economic resources associated with bringing state of the art emergency notification to the disabled community are adequate and, if not, what additional provisions are necessary. They should also address what the associated burdens would be of adding such resources.

40. Emergency Warning for Non-English Speakers. We should also consider the needs of people with primary languages other than English when considering the best method of contacting the public during an emergency. In order to ensure that foreign language audiences are alerted, the Commission's EAS rules provide that EAS announcements may be made in the same language as the primary language of the station.[85] We seek comment of the efficacy of these rules. For example, if a radio station transmitting in English is located in a predominantly Spanish-speaking community, should the station transmit EAS alerts in both English and Spanish? Additionally, products can be developed to convert the EAS digital signal to provide aural and visual messages in any language. We seek comment on whether current methodologies for providing alert and warning to non-English speaking persons are adequate. If not, what additional provisions are necessary, and what would be the costs associated with implementing such provisions?

G. Other Issues

41. Security. We also seek comment as to the security issues relevant to EAS. Security and encryption were not the primary design criteria when EAS was developed and initially implemented.

[83] Emergency information that is provided in the video portion of a regularly scheduled newscast or a newscast that interrupts regular programming must be made accessible through the oral description of the emergency information in the main audio, such as open video description. If the emergency information is being provided in the video portion of programming that is not a regularly scheduled newscast or a newscast that interrupts regular programming (e.g., the programmer provides the emergency information through crawling or scrolling during regular programming), this information must be accompanied by an aural tone. This tone is to alert persons with vision disabilities that the video programming distributor is providing emergency information, and to alert such persons to tune to another source, such as a radio, for more information. 47 C.F.R. § 79.2(b)(1).

[84] 47 C.F.R. § 79.2(b)(3).

[85] 47 C.F.R. §§ 11.54(b)(7), 11.55(c)(4).

Now, however, emergency managers are becoming more aware of potential vulnerabilities within the system. For example, the complete EAS protocol is a matter of public record and potentially subject to malicious activations or interference. Further, EAS distribution methods have potential for security concerns. For example, Internet Protocol-based systems and control links could be subjected to "denial of service" attacks aimed at preventing them from functioning.[86] Additionally, when a station is operating unattended, no one is available on-site to intervene should an unauthorized seizure occur.[87] There is also concern about physical security and unauthorized use of the system at state and local EAS activation sites. Although Commission-certified EAS encoders have the capability for password protection, it is up to each station and cable system to implement sufficient security and there is no way of knowing which stations use password security.[88] Finally, EAS signal could be subject to jamming. Such vulnerabilities could be exploited during times of heightened public anxiety and uncertainty. We seek comment on how to improve the security of EAS distribution methods, information, and equipment or how to ensure the security of any public warning system. Should the Commission require password protection of all EAS encoders? Who should be responsible for system security and what security standards, if any, should be implemented? How can the authenticity of EAS messages be verified and/or how can broadcasters be protected from liability issues if they inadvertently rebroadcast a false or incorrect EAS message? Would adoption of any of MSRC's Best Practices alleviate security concerns?

42. Location of EAS Equipment. In the *2002 Report and Order*, the Commission modified its rules to exempt satellite/repeater stations which rebroadcast 100% of their hub station from the requirement to install EAS equipment, provided the hub station complies with existing National level EAS equipment installation, activation and testing regulations.[89] We acknowledge that this practice removes EAS equipment from the satellite/repeater stations and thereby precludes their participation in the State or local EAS activations via the EAS network. We seek comment on the impact this practice has or will have on any proposed changes to EAS or public warning systems. We also seek comment on whether the Commission should extend this practice to any other EAS providers. In this regard, such comment should address whether any centralized placement of EAS equipment, such as at the head-end of a cable system or satellite uplink, would have a positive or negative impact on the efficacy of EAS as a national, state, or local emergency notification system. Where is the best place to locate EAS equipment so it can be the most useful and maintainable?

43. Testing. FEMA conducts weekly closed circuit tests of the PEP system by sending signals to EAS equipment at each PEP station site.[90] However, no on-air tests of the PEP system ever have been conducted. All broadcasters and cable operators are required to conduct EAS weekly and monthly tests to ensure their EAS equipment is in operating condition.[91] Should comprehensive periodic testing of the entire national EAS system from the PEP stations on down to state and local broadcast stations and cable systems be required? If so, how often should such testing occur? Should a special national level test code be adopted for this purpose, and should a post-test report be required? Should these national tests be in addition to the current testing requirement? Would having too many tests become a public nuisance leading to ignoring EAS alerts by the public? Additionally, we seek comment on whether the required monthly tests adequately evaluate the state-wide distribution of EAS alerts and, if not, what method of testing should be required.

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[86] *See PPW 2004 EAS Assessment* at 26-27.

[87] *Id*.

[88] *Id.*

[89] *See generally 2002 Report and Order*.

[90] There is also a National Periodic Test event code and National Primary sources must participate in Periodic National Tests as appropriate. *See* 47 C.F.R. §§ 11.31(e), 11.61(a)(3).

[91] *See* 47 C.F.R. § 11.61.

44. Training. Some broadcasters and cable operators state that the EAS system and equipment are difficult to learn and use during actual emergencies and that the infrequent use of the equipment results in staff members being unable to remember how to use it when necessary.[92] Additionally, lack of EAS training for emergency management personnel is a concern.[93] We seek comment on whether additional training resources should be provided to emergency managers and, if so, what these materials should include. Should there be periodic mandatory EAS training of broadcast station and cable system personnel? Should emergency managers receive mandatory education and training regarding how and when to utilize warning systems? Who should provide such education and training? Is there a need to educate the public about the EAS and public warning? If yes, who should be responsible for such education? Who should incur the costs of training materials and employee time?

45. Small Operators. Many of the topics discussed above would likely require participating services to incur additional costs. While large companies may have the resources to absorb equipment upgrades and staff, small business entities may not. Should the level of participation required be dependent on the size of the participating entity? How would predicating participation based on company size affect the usefulness of EAS? Should assistance be provided to small businesses? Should we consider government or other funding assistance to small entities? We note that many small cable operators have received temporary waivers of certain EAS rules due to financial hardship. What has been the effect of such waivers?

46. Enforcement. The Commission has been aggressively enforcing the Commission's EAS rules. In 2003, for example, the Enforcement Bureau took approximately 80 EAS enforcement actions. Nonetheless, some broadcasters have failed to install or properly maintain EAS equipment. The base forfeiture amount set in the *Forfeiture Policy Statement*[94] and section 1.80 of the rules[95] for an EAS violation is $8,000. We seek comment on whether we should increase the base amount or otherwise impose higher forfeitures in this area, and on whether there are additional ways to better ensure compliance. We also seek comment on whether we should seek legislation from Congress to increase the maximum forfeitures in this area from the current $32,500 for a single violation or day of a continuing violation and maximum of $325,000 for a continuing violation.[96]

47. Miscellaneous Issues. We request comments on any other matters or issues, in addition to those discussed above, that may be pertinent to establishing the most effective and efficient public warning system in the United States and its territories.

IV. CONCLUSION

48. We initiate this proceeding to establish a record on how the Commission can best facilitate the implementation of EAS as part of an effective public alert and warning system. After review of the record we will determine what rules or other next steps are appropriate. We may adopt new rules or revise certain of our current EAS rules, or we may combine an order adopting rules with a report

[92] *MSRC EAS Survey* at 20.

[93] *Id.* at 10.

[94] *The Commission's Forfeiture Policy Statement and Amendment of Section 1.80 of the Rules to Incorporate the Forfeiture Guidelines*, CI Docket No. 95-6, Report and Order, 12 FCC Rcd 17087 (1997), *recon. denied*, 15 FCC Rcd 303 (1999) (*Forfeiture Policy Statement*).

[95] 47 C.F.R. § 1.80.

[96] *See Amendment of Section 1.80(b) of the Rules*, Order, FCC 04-139 (rel. June 18, 2004) (increasing the statutory forfeiture maximum to reflect inflation, effective September 7, 2004).

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summarizing the record and our policy perspectives regarding matters raised in the record in advance of further work with DHS and others in this area. At the same time, we might make legislative recommendations to Congress. In this regard, we invite comments on whether the Commission should make recommendations to Congress regarding EAS, or whether any of the Commission's EAS rules not otherwise addressed in this NPRM should be changed, and if so, why. Finally, although we have identified above particular subjects that we believe of interest to the public regarding EAS and public alert and warning in general, we welcome comment on any other ideas relevant to the issues addressed in this NPRM.

V. PROCEDURAL MATTERS

49. Comments and Reply Comments. Pursuant to sections 1.415, 1.419, and 1.430 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, 1.430, interested parties may file comments on or before 60 days after publication of this NPRM in the Federal Register, and reply comments on or before 90 days after publication of this NPRM in the Federal Register. All filings should refer to EB Docket No. 04-296. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.[97] For additional information on this proceeding, please contact Jean Ann Collins in the Enforcement Bureau, Office of Homeland Security at (202) 418-1199.

50. Comments filed through the ECFS can be sent as an electronic file via the Internet to http://www.fcc.gov/e-file/ecfs.html. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, postal service mailing address, and the applicable docket number, which in this instance is EB Docket No. 04-296. Parties may also submit an electronic comment by Internet e-mail. To obtain filing instructions for e-mail comments, commenters should send an e-mail to ecfshelp@fcc.gov, and should include the following words in the body of the message: "get form <your e-mail address>." A sample form and instructions will be sent in reply. You also may obtain a copy of the ASCII Electronic Transmittal Form (FORM-ET) at <http://www.fcc.gov/e-file/email.html>. Parties who choose to file by paper must file an original and four copies of each filing. 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).

51. For hand deliveries, the Commission's contractor, Natek, Inc., will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE, Suite 110, Washington, D.C. 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 mail, Express Mail, and Priority Mail should be addressed to 445 12th Street, SW, Washington, D.C. 20554.

- All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

52. Comments and reply comments must include a short and concise summary of the substantive discussion and questions raised in the NPRM. We further direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. We strongly encourage that parties track the organization set forth in this NPRM in order to

[97] *See Electronic Filing of Documents in Rulemaking Proceedings*, 13 FCC Rcd 11322, 11326 (1998).

facilitate our internal review process. Comments and reply comments must otherwise comply with section 1.48 and all other applicable sections of the Commission's rules.[98]

53. To request materials in accessible formats (such as Braille, large print, electronic files, or audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at (202) 418-0531 (voice) or (202) 418-7365 (TTY). This Public Notice can also be downloaded in Word and Portable Document Format at <http://www.fcc.gov/cgb.dro>.

54. Ex Parte Rules. These matters shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[99] 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.[100] Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.

55. Initial Regulatory Flexibility Analysis. With respect to this NPRM, an Initial Regulatory Flexibility Analysis (IRFA) is contained in Appendix A. As required by section 603 of the Regulatory Flexibility Act, the Commission has prepared an IRFA of the expected impact on small entities of the proposals contained in the NPRM. Written public comments are requested on the IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM specified in paragraph 49 above. The Commission will send a copy of the NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[101]

56. Initial Paperwork Reduction Act of 1995 Analysis. This document contains proposed or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due 60 days after date of publication of this Notice in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

VI. ORDERING CLAUSE

57. IT IS ORDERED, that pursuant to in sections 1, 4(i) and (o), 303(r), 403, 624(g) and 706 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i) and (o), 303(r), 403, 554(g), and 606, this Notice of Proposed Rulemaking is hereby ADOPTED.

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[98] *See* 47 C.F.R. § 1.48.

[99] 47 C.F.R. §§ 1.200, *et seq*.

[100] *See* 47 C.F.R. § 1.1206(b)(2).

[101] *See* 5 U.S.C. § 603(a). In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] 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 Notice of Proposed Rulemaking (NPRM). 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 NPRM provided above in paragraph 49 of the item. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2] In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.[3]

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

2. In this NPRM, the Commission solicits comment on whether EAS in its present form is the most effective mechanism for warning the American public of an emergency and, if not, on how EAS can be improved.

B. Legal Basis

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

C. Description and Estimate of the Number of Small Entities to which the Proposed 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 will be affected by the proposed rules.[4] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[5] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[6] 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).[7] A small organization is generally "any not-for-profit enterprise

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

[2] *See* 5 U.S.C. § 603(a).

[3] *Id.*

[4] 5 U.S.C. §§ 603(b)(3), 604(a)(3).

[5] *Id*. § 601(6).

[6] *Id.* § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, 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).

[7] Small Business Act, 15 U.S.C. § 632 (1996).

which is independently owned and operated and is not dominant in its field."[8] The arts, entertainment, and recreations sector had 96,497 small firms.[9]

5. *Television Broadcasting*. The SBA has developed a small business sized standard for television broadcasting, which consists of all such firms having $12 million or less in annual receipts.[10] Business concerns included in this industry are those "primarily engaged in broadcasting images together with sound."[11] 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[12] must be included.[13] 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).[14] Given the nature of this service, we will presume that all LPTV licensees qualify as small entities under the SBA size standard.

6. *Radio Stations*. The SBA has developed a small business size standard for Radio Stations, which consists of all such firms having $6 million or less in annual receipts.[15] Business concerns included in this industry are those "primarily engaged in broadcasting aural programs by radio to the public."[16] According to Commission staff review of BIA Publications, Inc., Master Access Radio Analyzer Database, as of May 16, 2003, about 10,427 of the 10,945 commercial radio stations in the United States had revenue of $6 million or less. We note, however, that many radio stations are affiliated with much larger corporations with much higher revenue, and, that in assessing whether a business concern qualifies as small under the above definition, such business (control) affiliations[17] are included.[18] Our estimate, therefore, likely overstates the number of small businesses that might be affected by our action.

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[8] 5 U.S.C. § 601(4).

[9] *Id.*

[10] 13 C.F.R. § 121.201, NAICS code 515120.

[11] OMB, 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. *See id*. at 502-05, North American Industry Classification System (NAICS) code 512120, Motion Picture and Video Production; code 512120, Motion Picture and Video Distribution; code 512191, Teleproduction and Other Post-Production Services; and code 512199, Other Motion Picture and Video Industries.

[12] "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).

[13] "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).

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

[15] 13 C.F.R. § 121.201, NAICS code 515112.

[16] *Id*.

[17] "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 the power to control both." 13 C.F.R. § 121.103(a)(1).

7. *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.[19] According to Census Bureau data for 1997, in this category there was a total of 1,311 firms that operated for the entire year.[20] 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.[21] Thus, under this size standard, the majority of firms can be considered small.

8. *Multipoint Distribution Systems.* The proposed rules would apply to Multipoint Distribution Systems 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.[22] This definition of small entity in the context of MDS auctions has been approved by the SBA.[23] 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.

9. MDS also includes licensees of stations authorized prior to the auction. As noted, the SBA has developed a definition of small entities for pay television services, Cable and Other Subscription Programming, which includes all such companies generating $12.5 million or less in annual receipts.[24] 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 find that there are approximately 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 proposed herein.

10. *Instructional Television Fixed Service.* The proposed rules would also apply to Instructional Television Fixed Service 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.[25] There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational

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[18] "SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size." 13 C.F.R. § 121.103(a)(4).

[19] 13 C.F.R. § 121.201, NAICS code 513220.

[20] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 513220 (issued Oct. 2000).

[21] *Id.*

[22] 47 C.F.R. § 21.961(b)(1).

[23] *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).

[24] 13 C.F.R. § 121.201, NAICS Code 515210.

[25] *Id*.

institutions. Educational institutions are included in the definition of a small business.[26] 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 ITFS are small businesses and may be affected by the proposed rules.

11. *Wireless Service Providers*. The SBA has developed a small business size standard for wireless small businesses within the two separate categories of Paging[27] and Cellular and Other Wireless Telecommunications.[28] Under both SBA categories, a wireless business is small if it has 1,500 or fewer employees. According to the Commission's most recent data,[29] 1,761 companies reported that they were engaged in the provision of wireless service. Of these 1,761 companies, an estimated 1,175 have 1,500 or fewer employees and 586 have more than 1,500 employees. This SBA size standard also applies to wireless telephony. Wireless telephony includes cellular, personal communications services, and specialized mobile radio telephony carriers. According to the most recent Trends in Telephone Service data, 719 carriers reported that they were engaged in the provision of wireless telephony.[30] We have estimated that 294 of these are small under the SBA small business size standard.

12. *Broadband Personal Communications Service*. The broadband personal communications services (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than $40 million in the three previous calendar years.[31] For Block F, an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than $15 million for the preceding three calendar years.[32] These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.[33] No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.[34] On March 23, 1999, the Commission reauctioned 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.[35] On January 26, 2001, the Commission completed the auction of 422 C

[26] 5 U.S.C. § 601(3).

[27] 13 CFR § 121.201, NAICS code 517211.

[28] 13 CFR § 121.201, NAICS code 517212.

[29] FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service, Table 5.3, (May 2002).

[30] FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, page 5-5 (August 2003). This source uses data that are current as of December 31, 2001.

[31] *See* Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852, paras. 57-60 (1996); *see also* 47 C.F.R. § 24.720(b).

[32] *See* Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852, para. 60.

[33] *See* Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

[34] FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (released January 14, 1997).

[35] *See* "C, D, E, and F Block Broadband PCS Auction Closes," *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

and F Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in this auction, 29 qualified as "small" or "very small" businesses.[36] Subsequent events, concerning Auction 35, including judicial and agency determinations, resulted in a total of 163 C and F Block licenses being available for grant.

13. *Incumbent Local Exchange Carriers (Incumbent LECs)*. We have included small incumbent local exchange carriers 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."[37] 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.[38] 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.[39] According to Commission data,[40] 1,337 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,337 carriers, an estimated 1,032 have 1,500 or fewer employees and 305 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.

14. *Competitive Local Exchange Carriers (Competitive LECs), Competitive Access Providers (CAPs), "Shared-Tenant Service Providers," and "Other Local Service Providers."* Neither the Commission nor the SBA has developed a small business size standard specifically for these service providers. The appropriate size standard under SBA rules is for the category Wired Telecommunications Carriers. Under that size standard, such a business is small if it has 1,500 or fewer employees.[41] According to Commission data,[42] 609 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 609 carriers, an estimated 458 have 1,500 or fewer employees and 151 have more than 1,500 employees. In addition, 16 carriers have reported that they are "Shared-Tenant Service Providers," and all 16 are estimated to have 1.500 or fewer employees. In addition, 35 carriers have reported that they are "Other Local Service Providers." Of the 35, an estimated 34 have 1,500 or fewer employees and one has more than 1,500 employees.

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[36] *See* "C and F Block Broadband PCS Auction Closes; Winning Bidders Announced," *Public Notice*, 16 FCC Rcd 2339 (2001).

[37] *Id*. § 632.

[38] 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).

[39] 13 C.F.R. § 121.201, NAICS code 517110.

[40] FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, "Trends in Telephone Service" at Table 5.3, Page 5-5 (Aug. 2003) (hereinafter "Trends in Telephone Service"). This source uses data that are current as of December 31, 2001.

[41] 13 C.F.R. § 121.201, NAICS code 517110.

[42] "Trends in Telephone Service" at Table 5.3.

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.

15. *Satellite Telecommunications and Other Telecommunications*. The Commission has not developed a small business size standard specifically for providers of international 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 or less in average annual receipts.[43] 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.[44] 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.

16. 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."[45] According to Census Bureau data for 1997, there were 439 firms in this category that operated for the entire year.[46] 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

17. There are potential reporting or recordkeeping requirements proposed in this NPRM, particularly with regard to state and local EAS participation and participation by digital broadcasters. The proposals set forth in the NPRM are intended to enhance the performance of the EAS while reducing regulatory burdens wherever possible.

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

18. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives: (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 or reporting requirements under the rule for 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 small entities.

[43] 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

[44] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 513340 (issued Oct. 2000).

[45] Office of Management and Budget, North American Industry Classification System, page 513 (1997) (NAICS code 513390, changed to 517910 in Oct. 2002).

[46] U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4, NAICS code 513390 (issued Oct. 2000).

19. In setting forth the proposals contained in this NPRM, we have attempted to minimize the burdens on all entities.[47] We seek comment on the impact of our proposals on small entities and on any possible alternatives that would minimize the impact on small entities.

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

20. None.

[47] *See supra* para. 45.

STATEMENT OF
CHAIRMAN MICHAEL K. POWELL

Re: Review of the Emergency Alert System, Notice of Proposed Rulemaking

For over a half century, the United States has had in place a national warning system utilizing, in part, our Nation's broadcast outlets. From the CONELRAD, established in 1951 by President Truman during the Korean War to its replacement, the Emergency Broadcast System, established in 1963 by President Kennedy to the modern day Emergency Alert System (EAS), our government has sought to employ our country's media outlets as a mechanism for warning the American public of an emergency.

A lot has changed since 1951. As the primary role of EAS remains a national public warning system, increasingly state and local jurisdictions have used its capabilities to notify their citizens of local emergencies, including natural weather disasters and in saving the lives of many abducted children through the Amber Alert. In addition, EAS has grown from its predecessor's birth on AM radio to FM radio, broadcast television and wireline and wireless cable systems. Of course, the threats to our homeland have also changed dramatically over the last fifty years. As the world around us has changed, however, the import of the EAS as a tool for reaching our citizenry during time of need remains high.

We are proud to adopt this Notice today, as a result, in part, of the recommendations of the Media Security and Reliability Council and the Partnership for Public Warning and in coordination with our partners at the Department of Homeland Security and its component, FEMA and the Department of Commerce and its component, the National Oceanic and Atmospheric Administration's National Weather Service.

This proceeding will provide one of many vehicles by which we collectively explore the most effective mechanism for warning the American public of an emergency and the role of EAS as we move further into our digital future. I commend my colleagues here at the Commission and our partners at DHS, FEMA, DoC and NOAA for their dedication to making our homeland a safer place for our citizens.

STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

Re: Review of the Emergency Alert System, Notice of Proposed Rulemaking

It is essential that the American public has access to emergency information in times of crisis. The Emergency Alert System ("EAS") provides a means for the President and national, state and local authorities to directly relay emergency information to the public regarding such matters as national security and preparedness, natural disasters, and missing children alerts. As new communications technologies develop and become integrated into our society, it is important that we adapt our rules to ensure that the purposes of the EAS are being fulfilled. Today, we take an important step toward improving this critical public safety tool by seeking comment on how we can keep up with the changing times, technologies, and security issues.

Additionally, I am very pleased that this NPRM recognizes the Commission's continued commitment to ensuring that persons with disabilities and speakers of other languages have equal access to public warnings. It is critical that we keep these communities in mind, and recognize the particular benefits that digital and other technologies may provide, as we move forward to improve our emergency alert system.

I look forward to working with DHS, FEMA, NOAA, and NWS to create a system that effectively and efficiently utilizes modern technology to successfully keep the American public apprised of vital safety information.

STATEMENT OF
COMMISSIONER MICHAEL J. COPPS

Re: Review of the Emergency Alert System, Notice of Proposed Rulemaking

September 11 and events in this country since have highlighted the need for a warning system which affords national as well as state and local authorities the capability to provide emergency communications and information to the American public. The EAS serves as our primary alert system today for everything from weather emergencies to Amber alerts to save abducted children.

The Commission asked its Media Security and Reliability Council to examine the best means to reach the broadest possible population with emergency and public safety information. We also benefited in our deliberations from the analysis and recommendations of the Partnership for Public Warning, a public-private partnership whose goal is to increase emergency preparedness. These groups addressed shortcomings in the current EAS, including, among others, the need to upgrade the system and enhance its use for providing state and local, as well as national, emergency information. They considered the important goal of finding ways to integrate diverse technologies so people can receive information in myriad ways. And these expert committees concluded that while improvements to the EAS are needed, it remains integral to our national warning system.

I appreciate my colleagues' willingness to accelerate action on these recommendations through an NPRM rather than a start-from-scratch Notice of Inquiry. The issues on which we seek comment, in addition to the ones I've already mentioned, include bringing our warning system into the digital era, ensuring the security of the EAS, and addressing how best to provide emergency information to all segments of our population, including those with disabilities and those whose primary language is not English. We unfortunately do not have the luxury of time in these efforts. I vote for this item with the understanding that we will work aggressively in partnership with other government agencies, industry, and all stakeholders to promote a comprehensive national public warning capability.

STATEMENT OF
COMMISSIONER KEVIN J. MARTIN

Re: Review of the Emergency Alert System, Notice of Proposed Rulemaking

The importance of our ability to quickly and effectively inform the public of an emergency cannot be understated. Whether the issue is a terrorist attack or impending weather disaster, our success in this endeavor can mean the difference between life and death. Currently, we rely almost exclusively on the Emergency Alert System to disseminate warnings to the public. EAS therefore serves a critical purpose, yet it applies only to analog broadcast and cable television and its use is, in many instances, merely voluntary. We need either to update this system or to replace it with a more comprehensive and effective digital warning mechanism.

I strongly support initiation of this rulemaking to determine the best solution to ensure that all Americans can receive emergency information. I am pleased at the coordination that has taken place to date with the Department of Homeland Security and the Department of Commerce, and I look forward to working with these partners as well as our colleagues at the state and local level to develop the best system to protect the American people.

STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

Re: Review of the Emergency Alert System, Notice of Proposed Rulemaking

I am pleased we launch this review of our nation's increasingly outdated Emergency Alert System. We must move quickly to act on this rulemaking and further protect the lives of all Americans.

Our task is not easy, but we cannot afford to wait. The public warning capability of communications technologies should be among the highest priorities of this agency. This will take hard work and continued coordination with the Department of Homeland Security and our other partners.

The Cold-War era EAS system is an imperfect system for our modern society, but for the near term it remains one of the best options we have to deliver emergency messages to as many people as possible as quickly as possible. The Media Security and Reliability Council and the Partnership for Public Warning have suggested ways to improve EAS. The Commission must now buckle down and do what it is we are asking state and local officials to do – assess vulnerabilities, create a plan for better service, and review and update that plan as communications technologies evolve.

The American public expects broadcasters to deliver timely local and national emergency and public safety information. For example, the FCC's broadcast localism hearing in Rapid City, South Dakota, proved how vitally important disaster warnings are for rural areas of the country. The County's Emergency Management Director testified about the cooperation and collaboration among public safety officials and all local broadcasters that resulted from a devastating flood and led to a voluntary initiative to improve public safety warnings in the county. But not all broadcasters and state and local governments have taken this step.

We should use our oversight of the broadcast and other communications industries to ensure more consistency at the state and local level. With the transition of television and radio to digital broadcasting, we have an opportunity to improve upon the EAS system to communicate emergency and public safety information in even more targeted and innovative ways. We can design a system to better serve all stakeholders, including the disability community and the nation's many non-English speakers.

But we must act quickly. In conjunction with our other federal partners, the American public counts on us to ensure a public warning system second to none. It is imperative that we quickly put ideas into action and lead our country to an even higher level of security.